

Manufacturers Record

Exponent of America



Single Copy, 20 Cents.
\$6.50 per Year.

Baltimore, Md.
MARCH 3, 1927

"Come Home."

A suggestion was recently made by the Manufacturers Record to a New York business man that he ought to go South and study for himself the wonderful development under way. He is a native of the South but has not been through that section for many years. In the course of his reply he writes:

"Frankly, I am afraid to go—afraid that I might not want to come back.

"One reason is that I have been rather a religious reader of the Manufacturers Record until late in the night. Its alluring appeal to return has only served to revive and add fire to my boyhood aspirations and ambitions. Do you remember the address made by Mr. Edmonds 20 years ago entitled 'Come Home'?

"You may have stirred a self-exiled soul and I forgive you, but for the time being you had better let him stay here."

The address to which this gentleman refers was delivered in Boston before the Southern Society, and it did cause some members of that Society to return to the South and take part in its development. But we had no idea that the influence of the address was still lingering in the minds of any who heard it.

The view of this New York man is an interesting one. It shows that deep down in the soul of many a man living in the North and West there is a longing to come home; to come back and get into touch with Southern life once more and to feel the thrill that comes to every Southern-born man who, having left his section to seek employment elsewhere, longs, with an increasing longing as the years go by, once more to breathe the atmosphere of Southern life and to take part in the wonderful development under way.

Mencken has recently in derision dubbed the South "The Bible South." He was seeking to ridicule the devotion of this section to the Bible, but that was the highest compliment he could possibly have paid to it; and this devotion to the Bible and the things it stands for is one of the reasons why many a man born in that section, but living elsewhere, and many a man born elsewhere, is anxious to get into an atmosphere where life is not all sordid, but where the Bible is so universally recognized as to have caused the blatant writer to refer to it in derision as "The Bible South."

"Come home" is the cry the South is sending broadcast to the millions of its people who are now living elsewhere. "Come home" and rear your children in a Bible atmosphere; rear them where educational and religious opportunities can be found in every community. "Come home," where climatic conditions and what we have termed atmosphere as distinct from climate—the atmosphere of love, of kindness, of hospitality—make life worth living. "Come home" to a section which has been more richly endowed than any other part of the world in material resources and in opportunities for upbuilding.

And while calling upon its natives to "Come home," the South sends out with equal earnestness a call to people of other sections to come and make the South their home; to come and share in all its blessings and opportunities; to come and build a home where life is sweeter; where home means more than anywhere else; to come and take part in the boundless opportunities this section offers to the man of brain, or brawn, or money.

The Blue Book of Southern Progress, 1927 edition, will give you a vast amount of information about this South, with its call to "Come Home."



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Manufacturers Record

RICHARD H. EDMONDS, Editor

PUBLISHED EVERY THURSDAY BY THE

MANUFACTURERS RECORD PUBLISHING CO.

Office: Manufacturers Record Building, corner Commerce and Water Streets, Baltimore, Maryland

Printing Plant, 8th Floor, Candler Building, Market Place and Lombard Street, Baltimore, Maryland

RICHARD H. EDMONDS, President; FRANK GOULD, First Vice-President; VICTOR H. POWER, Second Vice-President;

I. S. FIELD, Secretary; J. ROBERT GOULD, Treasurer

BRANCH OFFICES:

CHICAGO, 11 South La Salle Street

CINCINNATI, 333 Dixie Terminal Building

NEW YORK, 901 Singer Building

SUBSCRIPTION RATES:

\$6.50 a year (in advance); six months, \$3.50; three months, \$2 to United States, Mexico, Cuba, Porto Rico, Hawaii and the Philippines. For Canada add postage \$2 a year. For other foreign countries add postage \$5.50 a year. Back numbers, if available and not over one month old, 20 cents each. From one month to six months old, 50 cents each; over six months old, \$1 each. In ordering change of address, give old as well as new address.


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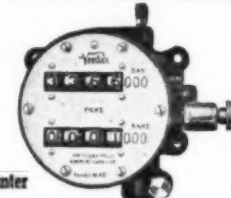


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Manufacturers Record

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Vol. XCI No. 9 }
Weekly. }

BALTIMORE, MARCH 3, 1927.

{ Single Copies, 20 Cents.
\$6.50 a Year. }

Increased Efficiency in Production and Distribution Opens Up New Epoch in Industry and Finance.

IN May, 1907, the writer listened to an address in South Carolina by one of the leading cotton manufacturers of that State pleading for leniency in criticism of the railroads and legislation against them. He said in substance:

"I have as much reason as any other man in the room to criticise the railroads, but I know it will not do any good. On the contrary, it will only delay the development of their facilities. Nearly six months ago," said he, "I bought and paid for \$500,000 worth of cotton at Memphis, not a bale of which has yet reached me because of the inability of the railroads to handle it."

At the same meeting some statements were made that millinery and other spring goods purchased in midwinter for business in South Carolina had not been delivered, and that the spring season was then practically over.

These conditions were typical of the entire business interests of the country. A complete breakdown of the railroads at that time resulted in an enormous quantity of products of all kinds being kept on the road or stocked at plants, expanding to an alarming extent the credit facilities of the country, and piling up in the aggregate a vast amount of unused material. One railroad president said to the writer:

"I have placed an order for locomotives which are much needed on my road, but the locomotive builders are unable to secure delivery of the steel which they bought for building these locomotives," and so the vicious chain went on and on through every line of business.

Contrast this condition with what we now see. Railroad efficiency of the present day hastens to immediate delivery every pound of freight that is offered to the roads. There is no accumulation of goods in transit as in former years, and no accumulation of stocks awaiting cars for shipment. The result is a decrease in the demand for credit and a tremendous lessening of the amount of stuff that must be carried on invoice. This condition has been steadily growing for the last two or three years. It is largely responsible for the hand-to-mouth buying which has gone on during that time, with the happy result that merchants and manufacturers do not have to carry heavy invoices and do not need the amount of credit formerly required to do business.

The change is so great that it marks a distinct epoch in all of our business operations. By reason of this railroad efficiency and the rapid delivery of all goods as ordered there is comparatively little accumulation of stock of any kind, and neither manufacturers nor merchants are loaded with heavy invoices. In fact, the shelves of merchants and the warehouses or yards of manufacturers are pretty well cleaned up.

Buying from hand to mouth as at present so greatly lessens

the amount of capital required as compared with former years that business people no longer have to strain themselves financially as under old conditions, when a great quantity of products of all kinds was held on the railroad trains or at terminal points for many months at a time. The liquidation of credits through this means has brought about new conditions and new methods of financing, the importance of which the country has probably not yet fully realized.

This change does mean, however, an increase in the volume of business on a reduced amount of money, and a safer, sounder way for all interests, both producers and consumers.

A Western manufacturer in a letter to the MANUFACTURERS RECORD on the subject writes:

"Both 1925 and 1926 were very prosperous years, having made records in steel production over any other years in history, these records having been made regardless of the three following conditions which I wish to bring particularly to your attention.

"First—During this period we have had the most tremendous reductions in inventories in all classes of material and by all lines of trade—railroad, industrial, jobbing, etc.—that has ever occurred in the same period of time.

"Second—Owing to the increased efficiency of our plants and of our distribution systems, there has also been a tremendous reduction in outstanding order obligations.

"Third—Owing to the increased efficiency of our railroads, there has been a great reduction in all classes of materials in transit.

"As an illustration: In all prosperous years preceding 1925, especially during the winter months, we suffered with railroad congestions and car shortages which probably accounted for the fact that from two to three weeks' production of the country was tied up in transit.

"If it could be determined by a survey what the total reduction in inventory in the United States has been and an approximate estimate made of the reduction in outstanding order commitments during this period, it would present some astounding figures.

"The reduction of inventories has been carried about as far as it can go, so that if the consumption of the country in 1927-28 would be equal to 1925-26 it would have to be entirely supplied out of plants and not a great part of it supplied out of stock as heretofore. This would make a tremendous increase in business volume from a manufacturing standpoint and should create for us greater prosperity than we have had in the years 1925-26.

"These inventory reductions have created a tremendous decrease in the cost of operation. Our plants are operating today on a higher degree of efficiency than ever before experienced, and we are getting the greatest production per unit that has ever existed, so that, even with this tremendous business volume, we have plenty of capacity to supply and there should be no congestion on the books of the manufacturers and no speculative buying of any kind."

A RIGHTEOUS VETO OF AN UNRIGHTEOUS BILL.

IN the light of the veto by President Coolidge of the McNary-Haugen bill it is interesting to study some of the evils of that bill as recently presented in a letter to the President by B. F. Yoakum, a railroad builder in former years, a farmer at the present time and a close student of economic conditions. In the course of his letter to the President urging that the bill be vetoed he made the following statements:

"Among the basic commodities named are cattle, hogs and wheat.

"To illustrate with one commodity—hogs: The advocates of the bill evidently had in mind that the 50,000,000 hogs sold a year would be shipped to the big markets in car and trainload lots and that the tax assessed against them would be in volume. But such is not the case. The tax assessment by the Federal Government under the McNary-Haugen bill is a tax against the individual farmer.

"There are 6,500,000 farmers, 45 per cent of whom are tenants. A majority of that poor class of farmers move every year or two, but all raise a few hogs for ready cash to meet the needs of their families. Under the provisions of the McNary-Haugen bill this of itself would create a situation that would require an army of Government sleuths to spy on the farmer to find out the name of the purchaser of his pigs and the price. It is the poor farmer who must pay the tax, by having it deducted from the price paid by the purchasers.

"The supporters of the McNary-Haugen bill must have considered farm conditions of forty years ago, when it was the custom to transport almost all foodstuffs between the farms and the largely populated centers by trains and boats. But manner and methods of transport have so changed that it is estimated that within a radius of 100 miles of largely populated centers like New York city more than 60 per cent of the farm products of that area are transported to market by motortrucks.

"One of the agencies for collecting this Federal tax as designated under the bill is the transporter. At present the system of gathering food products by thousands of butcher shops throughout the country is by motortrucks or from the farmers who sell their fat hogs to their nearby butchers. I know of and sometimes sell a few hogs to one of these numerous slaughter and small butchering houses, who distribute meat and other family and table supplies to consumers. The proprietor of this shop once told me that it is not unusual for him to purchase 25 or 30 hogs a day for his local trade. All similar places in country villages would come under the regulation of Federal inspectors to check up against the local butchers under a sworn statement.

"It is not hard to visualize an enormous army of detectives and secret service men who would bootleg between butchers, farmers and the Government. Basic farm commodities from every class and kind of dealers would come under the restrictions of the McNary-Haugen bill and require dealers to keep a record of every hog or other basic commodity purchased, from whom purchased, and swear to it or be subject to be sued in a United States court.

"A published statement from Secretary Mellon places the cost of operation at \$790,000 a year. This estimate is far too conservative.

"The Interstate Commerce Commission, after a systemization of its duties for more than 35 years, is costing about \$5,000,000 a year. The Interstate Commerce Commission's work is confined largely to studying traffic and transportation generally, requiring a large statistical and clerical force.

"If this law enacted by Congress, now awaiting your

approval or disapproval, should become operative, its clerical force will be greater than that of any department now in Washington. Its work will be enormous and of a character that will have to be checked and kept up with every day, with every farmer selling a hog to a dealer, local butcher or neighbor—it applies to all hogs alike."

In his veto message the President has clearly and forcibly presented his reasons for vetoing this bill, which the MANUFACTURERS RECORD strongly opposed when it was first proposed. There is pressing need for some legislation which will benefit agriculture, but this particular bill, we believe, would have proven a national disaster. Hoping to catch farmer votes, many Congressmen doubtless voted for it without regard to its dangers, justifying themselves on the ground that the President would certainly veto it. Out of all this discussion of the agricultural situation will eventually come some legislation which will prove of real benefit to the farmers of the country.

We congratulate President Coolidge upon his righteous veto of an unrighteous bill.

WHAT A HELPING HAND MAY DO.

IN the Editor and Publisher, a newspaper devoted to newspapers, Marlen Pew, in a story about newspaper workers and the tendency in olden days to drink, said:

"On Park Row, about a year ago, I saw a ghost whose ugly visage still haunts my thoughts. A ragged, bewhiskered, frightfully bloated man drifted up from Frankfort street and was lurching along toward Brooklyn bridge entrance when he caught sight of me. He paused, and then, to my horror, I recognized him. The spectacle of that man in the uniform of a Bowery bum petrified me. I must have registered amazement, for he took fright and disappeared in the crowd. Should I follow him? I decided against it. A hundred times in my life I have sought to drag men up from the booze abyss. It has been a wasted effort. Kind words, threats, appeals to pride, aid in getting jobs, a handout now and then and all else one could do availed nothing. It has been my experience that once a high-tempered man has started to slide to hell on a whisky-greased toboggan there is not much one can do for him except, perhaps, give him the price of more drink when his throat is parched with thirst. There comes a time when even this sentiment stales and sober men tire of investing their hard-earned dollars in that form of charity."

An old newspaper worker, who sends the MANUFACTURERS RECORD a copy of his letter to Mr. Pew, wrote the latter as follows:

"Have just read your most interesting 'Shop Talk' and am moved to two thoughts: (1) Somehow, newspaper men and 'drummers' never have received due credit for turning from their old alcoholic ways; (2) why do, probably, a majority of the newspapers oppose Prohibition, directly or indirectly, in the editorial and news columns?

"Your description of your down-and-out old friend impresses me tremendously. I, too, was once in that condition—a tramp, in the gutter, without a friend in the world—my family not knowing anything about me—a derelict. Then, God held out His hand, and in the barrroom of a little hotel I took my last drink—started to build myself up. So, I KNOW.

"So, I have hope for your friend. I am sorry you did not catch him and show him he had a friend left. Even a mere shake of your hand might have inspired a spark of determination in him. No man is a drunkard from choice. I believe that every drunkard periodically prays and beseeches God to save him—and such prayers never go unanswered or unappreciated. All God asks is that the unfortunate give the very slightest sign that he will help himself; the instant he starts to help himself, God helps him a hundred-fold. Please do not think this paragraph a reproach to you; no such thought is intended. I'm simply telling you the effect and value of even a handshake to a poor outcast. Nothing is more true than the Salvation Army adage: 'A man may be down, but he's never out.'

"Thank you greatly for the article, and if ever I can help send out the S O S."

The Human Element in Distribution.

AFTER all, the host of white-collar workers have a high economic value in the commercial world, and this is coming to be realized. Industry has learned that the factory operative is worth more as he produces more, and now the merchant is being advised that the man behind the counter means more to him than has commonly been realized in the past. As the study of business becomes keener, the importance of every human cog in the manufacture and in the distribution of commodities becomes more apparent. The progress of manufacturing has made the problems of distribution manifoldly greater, and, as in everything else, the human element is important.

Good-will in merchandising, one of the recognized leading assets, is greatly dependent upon the sales force. An editorial in a New York paper recently told the story of a Boston merchant who sought frank opinions from his department heads on what was the matter with his business, and one of them made this pertinent comment:

"Your selling force is the store, as far as the customer is concerned. The public does business with the employees, not with you. If the sales people are not interested in the success of the store—and they aren't—they are not going to exert themselves any more than just enough to hold their jobs and draw their pay. If you will take a more friendly attitude, pay a little more attention to your people, pay more liberally, you will get returns that will be worth while in the way of better spirit, harder work and larger sales. And you will find a better class staying with you, instead of only those staying who have no other place to go."

Here is the corollary of a question which was faced by manufacturers years ago. The issue was forced by organized labor, and higher wages were gained. The results have been so favorable that it is commonly recognized that higher wages are to the best advantage when a commensurate increase in production is realized. The unorganized clerks in merchandising have no weapon except ill-will to exert pressure upon their employers, but it can be readily seen that such a force is dangerous.

Another consideration, which also brings its lesson from the manufacturing field, is that the wider distribution of wealth increases the general buying power. The mass production of the country depends for its outlet upon the mass buying. When an industrial center anywhere suffers a lack of work, the unemployment among the operatives causes a lack of buying, which affects seriously the whole community round about. The obvious deduction is that salaried men, paid higher for intelligent service to customers in the merchandising field, would not only increase the profits of the business they represent, but would themselves contribute to the general welfare by their greater buying power.

Children of the present day, more than any previous generation, have cause to wonder how their forbears, even their immediate parents, ever got along in the past. The recent past is so radically different from the present that they have good reason for bewilderment. The standards of living have changed in the past and each generation has had such new things as to give them the same wonder about the past; but changes are so rapid in the Twentieth Century, at least in the United States, that adults themselves would be at a loss to go back to conditions they once faced.

Such is the great progress of this mechanical, scientific, chemical era that it is almost bewildering to keep up with it. But new things, by virtue of the new status of advertising, become commonplaces almost in a day. And one must get left behind if he does not keep awake to the changes. Indeed, the new things are such an important element in the

economic structure that they cannot be avoided. One must become acquainted with them, willy-nilly. Witness the automobile, which has become an industry that leads all the essentials in value of its products.

When a man buys a home he finds it equipped with all sorts of things he never dreamt of in the old days—perhaps an oil burner; surely gas and electric lights; maybe an electric refrigerator; extra water heater in the kitchen almost certainly. What is a house today without an accompanying garage? And what is a house without a radio? Yet it is barely more than a quarter of a century ago that phonographs were a proud and unusual possession of the household.

Comforts and conveniences, it appears, have become greater components of material life than necessities. That is, if we consider mere food, clothing and shelter as the real necessities. Which leads us to the point that, between necessities and luxuries—in which two classes it is customary to divide the essentials and non-essentials of living comforts—there is a third and preponderating class of commodities. These are luxuries in one sense, but essentials in most cases from the standpoint that they are in common use and therefore a man must have them or be out of step with the times.

Truly, it is a marvelous age; one which is creating a new world. Above all is the fact that the revolutionary progress being made is one which perforce makes for a raising of the general standards of living. Production is wealth. When it was smaller per unit of man-power it was distributed less evenly. The consumption was such that those who had plenty of purchasing power were satisfied, but the great mass had to be content with a meager portion. Now the capacity of production is such that industry is impeded if the purchasing power is not distributed over a large proportion of the population. And so leaders have come to realize that a larger distribution of wealth is necessary to take care of larger capacity to produce.

Prime necessities are the backbone of our existence, of course, but it is curious how far they now are counterbalanced by other things. The present conditions of life bear witness to the age-old truth that the desires of men are without limit. The progress of production, advanced through invention, research and science, is spreading wealth so that more and more of the desires of men are gratified. As new things are offered to man the proportion of bare necessities becomes steadily less because of the stationary quality thereof. Comforts and conveniences prevail.

So long ago as the time when this country was fighting for independence, Adam Smith wrote that "the difference of natural talents in different men is in reality much less than we are aware of; and the very different genius which appears to distinguish men of different professions, when grown up to maturity, is not upon many occasions so much the cause as the effect of the division of labor. The difference between the most dissimilar characters, between a philosopher and a common street porter, for example, seems to arise not so much from nature as from habit, custom and education."

In the nature of things, the division of labor requires that there be employers and employees; some have to direct enterprise and others to carry on the details. But intelligence is not given alone to the one or the other. If there is vanity among the heads of an enterprise which does not allow them to recognize the intelligence of their coworkers, as the employees certainly are, an antagonism develops which must react unfavorably on the business.

Foreign students of economics are struck with wonder at the extraordinary prosperity of the United States and the general high level of wages in industry here. Such a condition is eloquent testimony to the limitations of intelligence

or wisdom of the best of humankind. The leading minds of business abroad have not been able to devise ways and means of duplicating the progress on this side of the water. The enlightenment of our own leaders of industry and business has come not so much through prescience as through force of circumstances. Progress comes more in spite of men than through their own expedient.

All of which brings us back to the question of the human element in distribution. Brains there are, and must be, in selling commodities to the public. To get the best results therefrom the brains must be treated fairly. This means a larger share of the world's goods for services rendered, but such distribution of wealth means more general prosperity. This seems a reversal, perhaps, of the theory that a man must earn more before he gets more, but it should be considered rather a fairer recognition of the intelligence required in selling the customer. As more production per man in industry has come to be accepted as worth more and is a wise concession from employers, so benefit for everybody can be expected from more pay for more distribution.

SIR REGINALD McKENNA, CHAIRMAN OF THE MIDLAND BANK, LONDON, URGES MORE LIBERAL CREDIT FOR BUSINESS.

A LONDON dispatch to the Wall Street Journal gives an interesting summary of an address of Sir Reginald McKenna, formerly Chancellor of the Exchequer, and regarded as one of the foremost financiers of the world, delivered at the annual meeting of the stockholders of the Midland Bank. His address was summed up in this dispatch as follows:

"Sir Reginald McKenna, chairman of Midland Bank, at annual meeting of stockholders, made a sensational appeal for revision in the Bank of England statutes to permit cash and credit expansion. He said American prosperity was due considerably to greater elasticity of the Federal Reserve system. 'The American system,' he continued, 'is framed to suit modern conditions and recognizes the development of deposit banking. The Bank of England continues to operate under the Act of 1844, with insufficient reserves against deposit liabilities to permit open market operations with a view to increasing the volume of credit more than on a small scale.'

"Sir Reginald reviewed American-British trade developments since 1921 and noted the wide divergence between English and American monetary policies. He declared 'increased credit gives rise to greater demand for commodities, stimulates trade and brings more employment. A reduction in the quantity of money restricts trade, with resulting depression and unemployment. Since 1921 there has been great expansion in bank deposits in the United States. In November, 1922 to 1926, total deposits of banks in the Federal Reserve system increased \$4,330,260,000, while deposits of 10 London clearing banks declined \$592,920,000. Variations in quantities of money are due to variations in the total bank cash, and this is almost solely determined by action of the Bank of England, which, in practice, is controller of the volume of money.'

"He said he hasn't decided whether currency inflationists or deflationists have done more injury to Britain's welfare. 'Britain's nearly 1,500,000 unemployed, plus the normal growth in population of 200,000 annually,' he stated, 'should necessitate an immediate increase in banking credit, which is indispensable for carrying the larger volume of commodities which unemployed and new recruits will produce. Stationary or insufficiently expanding money supplies, with growing population, are deflation. A serious obstacle is the Bank of England's rigidity system. The vital need for the future is that expansion in trade be not hampered by false restrictions on the quantity of money.'"

FARM PROFITS BY MACHINERY.

TWO bits of mail which come to us from widely different sources serve remarkably well to give a striking illustration of the high degree of individual productivity with which our modern machinery methods have endowed our workers.

The first is a concise, colorless bulletin from the United States Department of Agriculture stating that "farm profits can be materially increased by the application of machinery and new methods."

The second is a sheet from the Sunday Baltimore American, carrying a story captioned "How America Is Selling Rice to Japan Cheaper Than Her Coolies Can Raise It." Japanese rice growers, having become alarmed at the recent invasion of their home market by a superior grade of American rice selling at a lower price, sent a commission of experts to this country to learn how we could produce so well and so cheaply. Photographs tell the story by contrasting the methods of the two countries. On the one hand, four tractors, each drawing a gang of five plows, enable a few well-paid American workers to prepare a vast, flat field for planting, while later in the season other powerful machines harvest the rice with the aid of a mere handful of men. On the other hand is a Japanese field, in which one laborer draws a small plow through mud and water, while another, wading behind, guides it; the same men, later in the season, harvesting the crop by slow hand-work.

The American workers, the Baltimore American records, receive wages of from \$3 to \$10 per day; the Japanese, 30 cents per day.

This is an uncommonly good illustration of the extent to which machine production has made life easier for us. Today it is easier for a man to earn the high requirements of a decent living than it formerly was for him to secure the much lower requirements of an old-fashioned good living.

Not all American farming operations are so susceptible to mechanization as the growing of rice on the vast, flat lands of the Sacramento Valley of California, but most of our agriculture is capable of a far greater degree of mechanization than is yet visioned by our farmers, and as they learn that fact and take advantage of it they will enter an era of greater individual productivity and prosperity similar to that now enjoyed by industrial workers.

For some years there has been a steady trend away from the farms of the country, and yet through improved machinery and its more general utilization we are producing more than we can consume or sell under present conditions. Agriculture is only beginning its work of reconstruction by farm machinery. It is passing through a crisis, due in part to the increased use of machinery, and in part to other conditions with which legislation can have little to do.

Following the same line of thought, Martin V. Calvin, for many years one of the most noted authorities of Georgia in agricultural matters, in a letter to the Atlanta Constitution, after reviewing the trend of farm population to the city, says:

"This is not a very agreeable fact, but it is a fact, and should be so regarded. It confronts farmers with a new situation which they may compass if they take it in hand in a common-sense way. The remedy is not in expectancy that the young negroes may be won back to the cotton and the corn fields.

"The number of laborers on a given farm having been eight, reduction to three can be, and should be, made by the introduction and skilful use of greatly improved farm machinery and the best obtainable labor-saving farm implements. A farmer and two grown sons, or two young men of a desirable class, by the use of machinery, can easily do, and do better, the work poorly done by eight men. That would mean system on the farm, indefinitely better results and increased hours of permissible leisure every day. There would be a

division of labor—money saving in itself. All domestic activities would be in line with systematic methods afield.

"According to the facts carried by tax returns, Georgia farmers have not been increasing their purchases of improved farm implements. Quite the contrary: The value of those implements in 1925 was \$77,161 less than in 1924. The returns show a difference against 1926 compared with 1924 of \$869,170. That represents fewer first-class implements in use in 1926 than in 1924. Of course, wear and tear must be considered, but that would not offset the deficiency in needed and valuable field appliances.

"This question of improved labor-saving farm implements and the latest available improved farm machinery is supremely important. It is impossible to overestimate its importance."

IMPERIAL TEXAS.

IN a personal letter to the editor of the **MANUFACTURERS RECORD**, Frank Gould, vice-president of this company, writing from Dallas, said:

"Dallas is big. I expected modern progress, but I have been amazed. Not only for the millions they have spent in building such a city, but in their outlook and expectations for the future, are they showing their bigness. So far as I can see they have no small ideas or plans. They confidently expect in the next 10 years to surpass the last 10, notable as these years have been. Wide streets, towering buildings, metropolitan hotels are all here, but back and behind all that is the confident pride and assurance of the Dallas business man that this is *the* city. It is very refreshing and inspiring. Note the enclosed figures; 1926 was in some respects not so good as 1925, but 'wait till this year's figures are completed.' The campaign of all these people here now is to get factories. They are going after them strong and are prepared as never before to advertise Texas resources. And the railroad people sometimes long ago used to tell me Texas would never be anything but an agricultural State! The Dallas papers are editorially carrying on a regular campaign about Texas minerals, timber, oil, lignite, etc."

This is just a little sidelight on the impression that Dallas, and for that matter all of Texas, is making upon Mr. Gould. His motor trip with Mrs. Gould through Texas, and, indeed, through the whole South, was made for recreation and rest and in order to view for himself some of the things which he had never before seen in some parts of the South.

Years ago it was the privilege of the editor of the **MANUFACTURERS RECORD** to visit Texas many times, and every time with increasing interest and increasing enthusiasm, not only for the bigness of the State in area but for the vastness of its resources and the bigness of its broad-brained business men. The very immensity of Texas in size seems to have developed a bigness of view, a bigness of expectation for the future of Texas on the part of its people.

Some day, perhaps, it may again be the writer's pleasure to visit the old scenes in Texas and note the tremendous progress that has been made since he was last there. But what Dallas people are expecting of greater growth during the next 10 years than in the last 10 will apply not only to that city but to the whole State. Imperial in area, imperial in resources and imperial in the vision of its business people, Texas is one of the wonders of the modern world. The growth of cities like Dallas, Fort Worth, Houston, Galveston, San Antonio and others is an inspiration to every man who is in touch with their magnificent progress. And then the Rio Grande Valley is being developed for semi-tropical fruits and vegetables in a way that fulfils the highest expectations of that empire builder, B. F. Yoakum, who was to that region what Henry M. Flagler was to Florida—a man with a vision, with a courage and the command of capital to do marvelous things.

A RADICAL PLAN PROPOSED FOR SUPPLYING ELECTRIC POWER TO FARMS.

ARTHUR WILLIAMS, prolific spokesman for the New York Edison Company, and thereby, in effect, the spokesman for the electrical industry in general, presented to the annual meeting of the Academy of Political Science in New York recently an interesting scheme for providing "highways for kilowatts" for the benefit of our 35,000,000 farm population. Agriculture, he said, is our most backward industry. In emphasizing this fact he sketched an imaginary printing industry that had not progressed during the past century.

"There would still be the old hand-press, with each sheet of paper individually selected and placed in position on the press before printing, its slow, tedious operation often requiring two men, in back-breaking, muscle-straining effort; there would still be the rotary press, turned by hand or kicked by foot; there would be inadequate ventilation, lack of proper sanitation, and the work, day and night, would be surrounded by conditions of a most undesirable and unhealthful nature."

What this imaginary printing industry would be, in comparison with what the industry really is, serves to indicate how backward farming is in modern methods as compared with what it should be.

Mr. Williams then quoted William Green, President of the American Federation of Labor, as follows:

"Workers have learned from experience that electrically driven machinery has lightened the burden of employment and relieved them of the drudgery and hardships of human toil. They now do with the machine what at one time required the strength and vigor of their bodies. Work has been made easier, life has been made more tolerable, living conditions have been improved and workers have been permitted to enjoy the blessings and benefits of modern life." To which Mr. Williams added: "These favorable conditions do not include the farm worker. He lives and works as in the days of his grandfathers and great-grandfathers, back hundreds of years, almost to the beginning of time. He finds his own muscles, and lessening strength with age, continuing in laborious toil where in all other industries power has taken their place. While other men, working eight hours a day, between five and six days a week, earn enough for comfortable and attractive living, his work begins before sunrise and continues until after dark, six days a week and a material part of the seventh day, with his home conditions, comparatively, most uncomfortable and unattractive."

The modernization of agriculture through the use of cheap electrical power presents the only solution of the problem, Mr. Williams said. To provide the network of transmission lines necessary to carry out the program would cost in the neighborhood of \$6,000,000,000, he said, and as one means for meeting this enormous financial requirement the speaker suggested the issuance of tax-exempt securities under some such authority as State public service commissions.

Complete electrification, Mr. Williams believed, would increase the value of farm property by at least 10 per cent. The work could be extended over a period of 5 or 10 years and carried on as highway construction is handled. "There would seem little question that electric power available on every farm would enormously enhance farm values of the entire country," he said. "Were this increase in value but slightly more than 10 per cent (a 40 per cent increase has been recently quoted in an actual instance in the State of Alabama), the entire estimated cost of highway electrification—\$6,000,000,000—would be offset in farm value increments alone."

SHALL BANKING HOUSES GUARANTEE CORRECTNESS OF ALL ADVERTISEMENTS OF BOND ISSUES?

THAT banking houses issuing securities should in some way guarantee the correctness of all the statements made in their advertisements has often been suggested by the MANUFACTURERS RECORD. Some bankers have protested that this was not feasible, but many people have thought that a banker has no right to use his influence with his customers to place securities unless he is in a position to say that the statements made in the advertisements over his name are guaranteed by him. It is a rather revolutionary suggestion, and one can readily understand that it does not appeal to banking houses, as it would involve a vast amount of investigation of the statements made and a heavy responsibility.

But the Appellate Division of the Supreme Court of New York has taken the ground that bankers must do this or be held liable for the consequences. The New York World of recent date contained the following in regard to the decision on this question:

"A staggering total of securities bought by the public in the last few years is affected by a decision of the Appellate Division of the Supreme Court handed down last Friday. Its importance, obscured then by a complication of legal details and now revealed for the first time, lies in the fact that scores of Wall Street firms may be made financially liable for false statements made in floating issues.

"In the belief that a single sentence relieved them of liability, such investment houses have sold new issues of stocks and bonds aggregating a sum undoubtedly greater than America spent in the World War. This has been done largely through sales circulars and advertising, in which thousands of issues have been recommended as good investments.

"These recommendations, however, in the great majority of cases have been accompanied by an all-important, although sometimes inconspicuous, reservation. In fine print, at the bottom of a circular or advertisement, there is almost invariably a line like this:

"Although the information contained herein is not guaranteed, it has been obtained from sources which we believe to be reliable."

"Wall Street, with the exception of a few important firms, has always assumed that this constituted sufficient precaution for the house which acted in all good faith and which made a reasonably careful investigation of the facts which led it to recommend an issue.

"Under the decision now made, houses of issue can be called to account for false statements in sales literature, regardless of whether they have plainly indicated their refusal to take responsibility.

"Upon a question of fact, an investor who has suffered loss through acceptance of such a recommendation can compel return of his money.

"The specific issue involved in this case, which is an action brought against the Equitable Trust Company by the Continental Insurance Company, the Fidelity Phenix Fire Insurance Company, can be further appealed with the consent of the court.

"Attorneys for the Equitable declined to reveal yesterday whether they would attempt this step, but it is believed certain that a question of such far-reaching importance will be carried in one way or another to the United States Supreme Court.

"A few attorneys have for years advised Wall Street clients to place little faith in any disclaimer of responsibility accompanying a recommendation to buy a bond or stock, suggesting the best procedure was to make only statements for which they had positive justification and to accept responsibility for such statements.

"J. P. Morgan & Co. and Kuhn, Loeb & Co., the largest private houses in the financial district, followed this course, and their advertising circulars do not contain the familiar 'dodge line.'

"The point now determined involves \$4,500,000 issue of

bonds of the Green Star Steamship Company offered for public sale in 1919 by a banking syndicate headed by the Equitable Trust Company. Relying upon this institution's statements as to the safety of the bonds, the circumstances and prospects of the steamship company, and a definite recommendation to purchase, it is set forth, the two insurance companies each bought \$100,000 worth of the issue from the Equitable. The statements referred to were accompanied by the following disclaimer:

"Although the information contained herein is not guaranteed, it has been obtained from sources we believed to be reliable and is the information on which we have acted in this matter."

"Subsequently the steamship company defaulted on its bonds, went through receivership and was reorganized. Still relying upon continued statements furnished by the trust company, and through it by Joseph Mercadante, president of the steamship line, it is alleged, the insurance companies made no complaint, participating in the reorganization by accepting new securities, although this involved a loss.

"In 1924, however, they heard rumors that a Chicago bank, which had been a member of the floating syndicate, had repaid some investors who had suffered loss. At that time they instigated an investigation and for the first time, it is alleged, became aware that erroneous statements had been made in the recommendation which induced them to purchase the bonds.

"They called upon the Equitable for return of the loss incurred, and when this was refused entered suit. Losing their first actions, an amended complaint was taken before Supreme Court Justice Proskauer in February, 1926. Attorneys for the trust company argued sufficient cause for action had not been shown. The Justice held, however, that the action was legally justifiable and was triable on the facts involved. This decision was appealed and was argued before the Appellate Division a month ago. Its decision open the way for trial in the lower court on a new basis.

"If the insurance companies can prove their charge that they were led to buy the bonds because of the defendant's erroneous statements, they can, under this ruling, recover the money they have lost."

CARNEGIE AND FORD AS PUBLICITY-GETTERS.

THOMAS A. EDISON, a warm friend and admirer of Henry Ford's, is quoted as saying, "Everything Henry Ford does is done for publicity," and the Tampa Tribune, commenting on that, said, "In this respect, as in others, Ford usually gets what he goes after, because his ideas are so striking that, whether right or wrong, they can seldom be ignored."

We have often said that while Mr. Ford is unquestionably one of the greatest business geniuses that this or any other country has ever produced, his genius for securing publicity is in some respects superior to his business genius.

He can do more things to create favorable publicity than any other man that America has produced except Andrew Carnegie, who for years was the foremost publicity-getter of this country. Mr. Carnegie also did things that compelled the newspapers to discuss him. He was always in the limelight. He was always vigorously doing the things that gave his publicity agents an opportunity to fill the American papers with stories of what Mr. Carnegie was accomplishing, whether in the building of a library, in giving an organ to a church or in scrap-heaping any plant when something else more modern had come into existence.

One of the biggest steel concerns of Pittsburgh once said to an advertising agent that they would not advertise because Andrew Carnegie did not advertise, and yet he received a vast amount of publicity and free advertising. The reply made was about as follows:

"When you have the genius to be able to secure without cost the limitless publicity which Mr. Carnegie secures, then you need not pay for advertising, but until you can match Carnegie in that respect you will find it profitable to advertise and pay for it."

FREIGHT RATES ON SOUTHERN LUMBER AND ON FARM PRODUCTS DEMAND ATTENTION.

IN the course of an address which he was invited to deliver before the Shreveport Lumbermen's Club recently, W. A. Anderson, president of the Shreveport Lumber Company, Inc., Shreveport, La., made an impressive presentation of the condition of the yellow pine lumber trade and the relation of freight rates on lumber to the prices obtained for the product. His remarks were in a very temperate vein and for that reason were all the more impressive. He pointed out that the depression in the trade had existed throughout the year 1926 after the first slump in prices, which took place in February last, excepting for a short favorable period in September, and, by way of introduction, he said that shipments of fir lumber to Texas points had increased 1000 per cent as compared with such shipments in 1925, in which year the total shipments of fir amounted to about 1000 cars, and that for 1926 there would be about ten times as many cars of fir shipped to the State of Texas. The problem, he said, could only be solved by co-operation between the railroads and the lumbermen, and if the subject was approached in the right way the yellow-pine manufacturing industry could be saved from the serious losses that threaten it.

Mr. Anderson's references to the railroads were very considerably presented. For instance, he said: "Most of us are disinclined to consider a remedy that may have the effect of disturbing some basic status quo, as, for instance, the freight-rate structure. The general prosperity of the country is so fundamentally attached to a prosperous condition of the transportation lines that no one wants to bother them, if it can possibly be avoided, because we all have a very nauseous recollection of the stagnant condition of transportation during the first half decade following the world war." Then, continuing, he remarked that it was not his intention to be ironical or sarcastic but that some things were done in the way of rate advances that no professor of economics could justify.

"For instance," said he, "the first great advance of five cents per hundred, which the Interstate Commerce Commission allowed the railroads, was applied alike to local and through rates. If a local rate was five cents, it immediately became 10 cents. If it was 25 cents, the advance made it 30 cents. In the one case the advance was 100 per cent and in the latter it was a 20 per cent increase. This flat increase of five cents was shortly followed by a 35 per cent increase in rates, which, as we have shown before, of itself produced a gross increase in revenue, according to no less an authority than Secretary Hoover, of \$3,800,000,000 annually.

"Now, anyone who says that these rate advances were logical would have a difficult time proving his point. As a matter of fact, any rate advance of a flat, unvarying nature, like the five-cent advance per hundredweight referred to, which produces advances in cost of transportation varying in per cent from 10 to over 100 per cent, is absolutely as uneconomic as can be imagined. Where the Interstate Commerce Commission erred was in not withdrawing the five-cent advance before applying the 35 per cent increase, which would have been ample at the time, and would not have disturbed the delivered selling prices of all commodities to such an extent that widespread distress was the immediate result. * * *

"It may be said that neither the yellow pine nor the hardwood industry of the South has ever been able to fully adjust itself to these two sharp rate advances, and my conclusion is that a commission with authority to act in conjunction with the Interstate Commerce Commission should be named by the Congress, which would in disinterested fashion readjust

the whole lumber rate structure, taking into consideration the interests of the railroads, the manufacturers and the buying public. That such adjustment is necessary may be easily cited in the fact that many through rates from the South to some consuming territories are nearly three times as great as to others, considering the distance of the haul.

* * *

"The yellow pine area of distribution has been growing smaller each year since the two major rate-advance shocks were withstood, while its great competitor of the West coast—fir—has been steadily encroaching upon that territory for the simple reason that the rate advances from the two producing territories have not been proportional. If the rate advance of approximately 75 per cent, which was first applied on yellow pine, had been fully assessed against fir, the rail shipments of that wood would have been cut off to a disastrous extent. On account of the practical doubling of capacity of the West coast mills, even the advance that was applied—though it was less than went into effect generally throughout the country—was enough to make marketing fir difficult, and they are still begging for rate reductions as a panacea for their own economic ills. However, the West coast has the Panama Canal and water transportation to our big Eastern cities, which more than equalizes the increases in cost of transportation by rail they have been compelled to bear.

"With the South, however, it is different. Some lumber moves coastwise by vessel, but the great bulk of it goes by rail."

In conclusion Mr. Anderson said that the situation was up to the railroads; that "they are now getting too large a proportion of the delivered price on Southern yellow pine and hardwoods, and if they want to see tonnage go down, which will affect them as well as the mills and the people engaged in production, all they have to do is to take a reactionary attitude. Some big, wise railroad men are waking up to the needs of the public they serve. The future of the industry is largely in their hands, as legislative action is generally too unintelligent to fit such a widely prevalent need."

Not only do the lumbermen of the South need consideration in the matter of freight rates on their product and covering the discrepancies to which Mr. Anderson so earnestly points, but the farmers imperatively need full consideration in the matter of freight rates on agricultural products. Murmurs of discontent are to be heard in the great rural regions, as well as elsewhere in farming communities. If railroad men would be wise, they will get in sympathetic touch with the farmers and try to help them find a way out of their economic difficulties by making some concessions. The psychology of public thought is such that there is danger of another wave of agitation against the railroads sweeping across the country. As Mr. Anderson said concerning lumber rates, "some big, wise railroad men are waking up," but not all of them are. It will not do to say that there have always been murmurs, because the present state of affairs is greater than the average. The prosperity of the railroads and of general industry awakens hostility in the minds of the farmers who are having a hard time to get along. The railroads need to be "as wise as serpents and as harmless as doves" and they need to meet the public more than halfway.

SERVICE FOR OTHERS.

THE MANUFACTURERS RECORD is in receipt of a copy of the Statement of Condition of the State Bank of Vesper, Wis., of which George H. Horn is president. On the back of the statement the following appears:

"This Bank Does Not Measure Its Service in Terms of Profit.

"Our secret of our growth lies in the fact that we have not

tried to please ourselves, but to please our customers with a conservative, efficient and courteous service.

"We do not believe in red tape. However, we do believe in taking a careful interest in our depositors and their business and trying in every way to serve them in the way they want to be served.

"Will You Let Us Serve You?"

The sentiments expressed in the foregoing are worthy of consideration by every banker in the country and by every other business concern seeking the welfare of customers as well as its own individual welfare.

ARE AGRICULTURAL COLLEGES TEACHING AGRICULTURE?

W. C. HOGG of Houston, Texas, in referring to a recent cover-page editorial about the work of agricultural colleges in the South in training young men for farm work, writes as follows:

"You are not editing a journal on education, but as you are assessing the points of promise in the South and have touched on the subject of agricultural education, why not develop the real situation by ascertaining how many agricultural colleges in the South are truly stressing agriculture as a vocation?

"My scant observation leads me to believe that you would be woefully surprised if you bored into the subject. Much emphasis is placed on numbers in the larger colleges and on the curricula and attendance per subject read, sorrowfully like that of a college of liberal arts. And try and get an agricultural specialist or graduate from one of the agricultural and mechanical colleges for county demonstration work, or to head a great rural enterprise, and see where you finish. I said agricultural colleges of the South."

The question raised by Mr. Hogg is an interesting one. What are the agricultural colleges of the South actually doing in training young men for scientific agriculture and impressing them with the opportunity for the development of the agricultural interests of the South? We pass the question on to the presidents of the agricultural colleges of the South, and ask them to reply through the MANUFACTURERS RECORD as to what their colleges are doing to meet the question raised by Mr. Hogg.

THE SOUTH AND THE DAIRY INDUSTRY HELP THEMSELVES.

THE dairy industry cannot simply "grow," like Topsy, in the South, or anywhere else, without aid. So the South is helping itself in helping the dairy industry to help itself and the Lord is helping both.

Recent evidence of this self-help is noted in a "Dairy Products Special" train run through West Virginia in a co-operative movement between the Baltimore and Ohio Railroad and the Guernsey, Jersey and Holstein breed associations, the National Dairy Council, West Virginia University and civic organizations in the towns at which the train stopped. The equipment consisted of a flatcar for demonstration purposes, three cars of purebred dairy bulls, one car of exhibit animals, a lecture car, an exhibit car, two Pullmans and a diner. Says the West Virginia Agriculturist:

"Twelve stops were made in West Virginia. At each stop the program included talks on 'Better Dairy Methods' and judging demonstrations for the farmers assembled. While these meetings were being held at the train, National Dairy Council representatives were speaking to the women and to the students of the local high schools. The programs were concluded with the offering for sale of the purebred sires carried on the train."

An industry and a section which help themselves in such practical fashion is sure to develop.

INTERESTING VIEWS OF MANY PROBLEMS.

OCCASIONALLY there comes to the editor a personal letter so interesting and suggestive that, though it cannot be published over the name of the writer, it is quoted for the benefit of our readers. A letter of this kind, written by a broad-visioned man who studies all the great problems of the day, is as follows:

"I think that any calm study of constitutional progress will show convincingly that whenever a great majority of this people want something they will get it, because the Constitution will be interpreted so that they can get it. I do not think any lawyer will contest that. Moreover, that's what the Civil War achieved.

"In regard to spending money in elections, there isn't any kind of campaign, political or otherwise, that can be carried on today without money. Naturally, Mr. Coolidge received contributions from corporations. Both parties do it, and they always have done it and they always will do it. But the process is its own corrective, since the different contributing agencies themselves have divergent interests. There is less corruption in politics today than in a century. Mr. Calhoun did things in South Carolina that would not be countenanced for one second anywhere in America today. Pennsylvania politics is almost pure in comparison with what it was a generation ago. The mistake is in assuming that the electorate is purchasable. The answer is, not to stop propaganda but to have the people intelligent enough to form their own conclusions. We are accomplishing that by means of the radio, the popular press and the newspapers.

"I do not think Mr. Vare bought his election. What he did simply was to order a certain majority for himself in Philadelphia. He doesn't have to buy, because he controls the count. There is less political corruption in America today than there was in England 100 years ago. Mr. Insull did not buy the election in Illinois. As a matter of fact, the other public utility interests are very angry with him. I think we may as well recognize that money is going to be spent in elections and merely insist that there be a correct and accurate statement of where the money comes from and how it is used. I do not see any good reason why a man should not be allowed to buy as much newspaper advertising space as he wants to, to enhance his election chances. True, it gives him an advantage over a poor man, but there is no method under the sun whereby we can arbitrarily equate differences of that sort.

"This nation today is the wonder of the ages. It is as if God had set up this continent for a great experiment. And what a wonderful laboratory it is! We are just at the beginning and, of course, are not without flaw. We have to go a little further in material achievement before our progress in the higher lines of culture is possible. We are moving steadily forward, and anybody can see it. Take so incidental a thing as indecency in plays. Put a really decent play or a really decent movie where the public can get to it and see how the people flock. I notice that a decent play put on in New York a couple of weeks ago has shocked the purveyors of nudity by breaking all sorts of records for receipts. There is an honest movie on in this town right now, playing at theatre prices, which tells a story of sacrifice and devotion, with no sex in it at all, and the house is sold out twice a day. We have nothing to worry about when we compare this age with any that went before. I am not going to allow myself to be unduly disturbed at some of the incidents that are emblazoned in the press which seem to indicate that we are moving backward.

"Neither Smith nor Vare in the Senate would ever amount to much. They will pass their way without any great influ-

ence on national affairs. But for the sake of them we certainly cannot afford to go to the extreme of denying a State the right to seat a man when he is sent to the Senate with credentials that are prima facie correct. Anyhow, that is how I look at it."

MANY MEETINGS SCHEDULED FOR SAME DATES.

THE board of directors of the National Association of Manufacturers will meet in Atlanta on March 22 to begin a study of the different cities in the South and see which one seems most desirable for the annual meeting of that Association next fall.

The American Mining Congress has called an industrial congress at Birmingham on March 21 and 22.

The Southern Pine Association will hold its annual meeting in New Orleans on March 22 and 23.

While these meetings are entirely separate and distinct in their work, yet in one way or another they all dovetail together in such a manner that it would have been most desirable if they could have been placed at dates which do not conflict.

It might be well, therefore, for great organizations of this kind in making their schedules for the annual meetings to see if they cannot get in touch with each other in advance and thus avoid having their meetings on the same dates.

THE DOLL AS AN INTERNATIONAL FACTOR.

NOW that it has voiced its views on such a temporal subject as a strike on the Western Maryland Railroad, the Federal Council of Churches may feel free to resume its spiritual activities in "promoting international justice and good-will" by distributing American dolls among the children of Japan. Uncle Sam stretches his "hands across the sea" to Nippon, and both hands are full of dolls.

In conducting an ante-Christmas collection of puppets, the Federal Council specified that "each doll must be accompanied by 99 cents to defray its railway and ticket charges and one cent for passport costs." As Mr. Squeers once remarked, "There's richness for you." As a promoter of international justice and good-will the doll now must be regarded as a most important factor; the infant hearts of Nippon hereafter will palpitate with emotions of international justice, not to mention good-will.

Rumor has reached us that garbage collection in certain cities, especially in far foreign lands, has been somewhat lax of late. We mention this merely in chance that the Federal Council is short of spiritual and temporal pies into which to stick its finger.

ANOTHER SOUTHERN MAN RECEIVES NATIONAL HONOR.

THE American Ceramic Society recently selected as its president B. Mifflin Hood of the B. Mifflin Hood Brick Company, Atlanta, Ga. Such an honor is a worthy tribute to a man who has done much for the development of ceramic industries in the South, and especially for the part he played in getting a ceramic school established as a part of the Georgia Tech curriculum. No State in the Union seems to be richer in ceramic opportunities than Georgia. While developing his own business to a national basis, Mr. Hood has been active in attracting ceramic manufacturers to the study of Georgia clays. The great national organization is to be congratulated on the election of Mr. Hood to its presidency.

THE FINISHING TOUCH ON THE SOUTHERN RENAISSANCE.

WHEN New England writers cease their long-continued vilifications of the South and actually begin extolling its virtues, the flood-tide in the affairs of Southern men has surely set in. However discreditable it may be to Southern people, it is nevertheless true that they have long been too much inclined to buy their histories from the pens of New England writers rather than produce any of their own, and as a consequence the uninformed, bitterly prejudiced views of the South held by many New England people have been to a considerable extent accepted by Southerners themselves. Thus a motion-picture star is quoted in an interview with a movie journal as saying: "To think that poor me from away down South had suddenly become a star!" Why shouldn't a Southerner become a star? What is the matter with Southern people that they should hold such ideas of themselves? It is said that a Southern woman, authoress of some beautiful negro spirituals, said: "I was wild with joy to think that songs written by poor me from away down South were accepted by one of the leading publishers of America." How a woman with such a crippling inferiority complex ever had the nerve to write a song is hard to understand.

But the same attitude is apparent, now and then, in many phases of Southern life. Northern engineers are frequently preferred to Southern engineers by Southern clients, and for no reason in the world but because of that inferiority complex. We heard recently of a Southern contractor who refused to bid on a job because it was a little out of the ordinary. He said one of the Eastern contractors should be called in!

Fortunately, this servile attitude is confined to only a portion, probably a minority, of Southern people. Many thousands of Southerners have risen superior to it, and have taken places of leadership in all walks of life outside the South. At the annual banquet last fall of the National Association of Manufacturers in New York city, one of the speakers was Finis Garrett, a native and a representative of west Tennessee, and leader of the minority in the House of Representatives in Washington. Representative Finis Garrett of Tennessee was introduced by the leader of the majority in Congress, John Q. Tilson, a representative of Connecticut, but a native of eastern Tennessee. And John Q. Tilson of Tennessee was introduced by John E. Edgerton of Lebanon, Tenn., president of the National Association of Manufacturers, one of the greatest, if not the greatest, of all the trade associations of the United States. Two of the twelve justices of the United States Supreme Court are natives of Tennessee. Similar instances of Southern leadership could be related without end.

In the early history of the nation the Southern States produced a conspicuous majority of the country's greatest leaders. The blood of those men still flows in Southern veins, still produces able men, and now that the South is developing its resources and thereby offering greater opportunities, the emigration of so many of our most capable sons will be halted and once more the South will reveal to the world the richness of its heritage.

But the Southern people must free themselves of that shackling inferiority complex. A man from Pittsburgh recently said: "I own property in Birmingham that has doubled in value twice in the last 10 years. If the Southern people who live in Birmingham could lose today the feeling of inferiority they have accumulated by reading for 60 years literature that defamed and belittled them, my property would double in value again tomorrow."

Increasing Number of Tourists in Florida.

Daytona Beach, Fla., February 24—[Special.]—Within the last 10 days or two weeks there has been a great increase in the number of tourists in Florida. Many hotels which had comparatively few guests a month ago are now crowded. Some are compelled to turn off would-be guests.

Some of the hotels report they are having the best season they have had for two years, because last winter they did not cater to the speculative real estate crowd that came to Florida, while this year they have many of their old guests of former years who would not come down last winter in the hurly-burly of those days.

Surely if Florida ever was inviting to the tourist and the health seeker, it has been so this winter. With the exception of two days of cold weather and frosts which did some damage, we have had the most wonderful winter the writer has ever known in a long experience in Florida. It has been a winter of glorious sunshine day after day, with only two rainy days or even cloudy days since the middle of November. When one contrasts this weather condition with the blizzards and snows, the sleets and fogs and rains which have prevailed in other sections of the country, he can scarcely believe that at so short a distance from the North and the West there can be found a region of such marvelous climatic conditions.

Some friends left Baltimore on Saturday last, following a blizzard condition of Saturday and slush and sleet of Sunday, and landed in Daytona Beach when the sky was the bluest of the blue and the weather was gloriously fine, and they have not yet recovered their equilibrium from the wonderful change from one extremely undesirable climatic condition to the wonderfully fine weather they found here.

If ever there was a time when Florida was inviting to the tourist, it is now. March, April and May are generally the most glorious months in the year, although some people insist that often June surpasses even May. The great majority of tourists make a serious mistake when they leave Florida early in the season just because there may be a few days of extra warmth. As a matter of fact, April and May, judged by the writer's personal experience, are the most delightful months to be found anywhere, and those who go North before the weather is fully settled at home often have to pay the penalty by bad colds and sickness for doing so.

Champion Switch Company to Move to West Virginia—Plans Expenditure of \$400,000.

Kenova, W. Va.—Plans have been announced for the removal of the plant of the Champion Switch Company from Buffalo, N. Y., to Kenova, where it will occupy buildings formerly used by the Kenova Mine Car Company. The Champion Switch Company was organized about three years ago for the manufacture of high-voltage switches and incidentally to provide a larger market for Jeffrey-Dewitt insulators, which are used in switches and other power equipment manufactured by the switch company. Sales offices of both the Champion Switch Company and the Jeffrey-Dewitt Company, formerly located in Buffalo, will be moved to Kenova, according to J. F. Sinclair, treasurer and general manager of the former company.

Buildings to be occupied by the company were purchased from the First Huntington National Bank of Huntington, W. Va., which had recently acquired them. An expenditure of approximately \$400,000 will be involved in the removal of the plant; this is expected to be under way early in March. The enlargement of the plant of the Jeffrey-Dewitt Company and the extension of its markets will also be a part of the proposed development plan of the companies. F. D. Stranahan of Toledo, Ohio, is president of the Champion Switch Company.

\$75,000,000 Cuban Road Contract Signed.

Warren Brothers, Boston, Mass., in a wire to the MANUFACTURERS RECORD advise that contract calling for the building of the 750-mile Central Highway in Cuba at an approximate cost of \$75,000,000 has been formally signed. Particulars concerning the road-building program of the Cuban Government were published in the issue of January 27. A loan of \$10,000,000 has just been negotiated by the Cuban Government to facilitate financing of this construction, and details appear elsewhere in this issue.

Business in Government.

[From the Atlanta Constitution]

The editor of the MANUFACTURERS RECORD, always progressive, and yet always conservative in taking frank and courageous positions against the radical and demagogic tendencies of professional politicians, never wrote truer or more timely words, or expressed more constructive thought, than in the following from the last issue:

"Politics dominates business to the disadvantage of the country. Business in its broader sense, which means industry, agriculture, commerce and finance, should dominate politics and governmental affairs. Any broadly educated business man of managerial ability, accustomed to doing things and not talking only of doing them, who comes up against the bureaucratic and political methods of government feels that the case is hopeless. There are a great many business men in this country who will not under any conditions bid on any work for the United States Government because of its red tape and bureaucratic management of affairs. There should be more business in government and less of politics; and a real business man, a man equipped mentally and spiritually and managerially, and in every other way for holding such a high office, should some day be made President of this country, with full power to cut its red tape, to abolish many of the useless methods that prevail and 'hew straight to the line, let the chips fall where they may.'"

Right now political factions are at work. Groups of politician-manipulators are spreading propaganda, trying to capitalize for some one or other prospective candidate before the 1928 party conventions popular issues upon which they hope to build convention strength. Sincerity is not a factor. Expediency is. And every movement on the chessboard is being made by politicians—and would-be politicians—in the selfish interest of politicians. Nothing else is thought of. Platitudes are framed around designing motives.

We are drifting rapidly upon the rocks of bureaucracy, and we know it. We are in the grip of blocks and factions and cabals and minority government, and we know it. Such prosperity as there is in spite of these conditions. It would be immeasurably greater if the red tape could be cut and if government could be removed from selfish political influences.

Can it be done? Of course it can, but not until the people's civic and national consciences are aroused to its necessity—and sufficiently aroused for every citizen to realize his obligation to his country and his patriotic duty as a voter whose ballot shall be counted.

The Democratic South should furnish the next Democratic candidate for President. He should come from the ranks of the successful, outstanding business men of the South—men who know how to administer great affairs, who know business principles and how to apply them; who know the fundamentals and how to observe and execute them.

Why go to a Republican State in the East or Central West or Far West for a Democratic politician and professional office-seeker for a candidate, whereas there could be no Democratic party without the South's electoral vote? Why a professional office-seeker politician when real business executives of recognized ability and integrity are available?

\$20,000,000 Hydro-Electric Project for South Carolina Under Way Soon.

GENERAL GAS AND ELECTRIC CORPORATION ANNOUNCES PLANS FOR DEVELOPMENT ON SALUDA RIVER WITH DAM 8000 FEET LONG, 188 FEET HIGH AND CUBICAL CONTENT OF 11,000,000 CUBIC YARDS—WILL CREATE LAKE 30 MILES LONG, WITH AVERAGE WIDTH OF 3 MILES—MACHINERY WITH CAPACITY OF 200,000 HORSE-POWER TO BE INSTALLED.

A gigantic hydro-electric development on the Saluda River, 10 miles west of Columbia, S. C., rivaling Muscle Shoals and involving an initial expenditure of \$20,000,000, has been undertaken by the General Gas and Electric Corporation of New York. This project, known as the Saluda development, will, it is claimed, under comparable conditions of rainfall during drouth, yield a greater amount of 24-hour power than is at present available at Muscle Shoals, Ala. More than 50,000 acres of land will be utilized in developing an annual output of over 300,000,000 kilowatt-hours; the proposed dam will be the largest in the country, and, it is believed, the largest in the world, in cubical content; the storage of water behind the dam will be the largest of any in the United States, while the lake to be created will have nearly twice the surface area of Lake George in New York State. Work will start immediately.

Details of this undertaking, which comes at a time when the interconnection of power lines over wide areas and other superpower developments have focused world-wide attention upon the electric power industry of America, were revealed following two years of preliminary work and investigation. Inasmuch as factory sites are to be available in close proximity to what will be virtually an unlimited power supply, the project stands to rival in this respect, as well as in a very large potential of energy, the famous Government project on the Tennessee River, say the promoters.

The General Gas and Electric Corporation report they have selected as associates in this huge undertaking some of the largest and best known banking firms of the country, "who recognize that the entire development is sound from an economic and engineering point of view and that the future of the State of South Carolina will be greatly enhanced as a result."

W. S. Murray, senior member of Murray & Flood, who prepared for the United States Government a survey of the Boston-Washington Superpower Zone, discovered the possibilities of the development and his firm will be the supervising engineers. The W. S. Barstow Management Association, Inc., will do the construction work; this will be facilitated by the fact, of importance from the standpoint of financial outlay, that much of the construction will be done in the dry. The territory to be served by the new source of power supply will include the greater part of South Carolina.

The General Gas and Electric Corporation will control the Saluda development through the Lexington Water-Power Company. The greater portion of power to be generated at the development will be sold to the Broad River Power Company, principal subsidiary in South Carolina of General Gas and Electric.

According to the General Gas and Electric officials and

the engineers in the construction of the Saluda hydro-electric development, a number of new records are to be established, of which the following are outstanding:

1. The proposed dam is to be more than 8000 feet long, 188 feet high and will be by far the largest in cubical content in the country, containing 11,000,000 cubic yards. The material will be brought in and placed in the dry by railroads and an impervious core will be made by hydraulically washing the fine materials into the central third portion of the dam.

2. The storage of water behind the dam will be the largest of any in the United States and the lake created will be over 30 miles long and at one point 14 miles wide, with an average width for the entire length of nearly 3 miles; its top surface will be nearly twice that of Lake George in New York State.

3. The huge quantity of water to be stored in the upper 60 feet of the basin will permit it to carry in suspension a very large potential of energy, which is to be an invaluable asset to the mills of South Carolina during a period of drouth. Furthermore, in the event of a drouth lasting for 25 consecutive weeks there would be available 500 horsepower to each of 40 mills for six working days of 10 hours each a week throughout the entire period. Simultaneously, additional energy would accrue from water flowing into the lake during such a period and this would more than offset losses incident to the transmission of power from the generating station to the mills.

In explaining the new development and its projected size it was stated that the storage of water, if contained in a single cube, would require one 4000 feet long, 4000 feet wide and 4000 feet high. A conception of the dam's magnitude is seen in the fact that the width at the base of its mid-section will be over 1200 feet, or almost one-quarter of a mile. To complete this dam 24 construction locomotives and 200 dump-cars, many miles of track, apart from approximately 60,000 feet of railroad trestle on the dam site alone and 15 to 20 steam shovels will be required.

The actual capacity of the machinery to be installed in the power house will be over 200,000 horsepower, and through its proposed connection with the high-tension transmission lines of the Broad River Power Company and other interconnections in contemplation there will be provided the means for widespread distribution of power throughout the State. In the development itself South Carolina will have one of the greatest sources of hydro-electric supply in the world, it is said.

W. S. Barstow, president of General Gas and Electric Corporation, in announcing the Saluda River development said:

"We are satisfied that this development is the next logical

economic move, both for the State of South Carolina and for the electric utility companies, and it gives the General Gas and Electric Corporation management great pleasure to announce that arrangements have been made to furnish the necessary capital to the Lexington Water-Power Company to proceed with the development. When completed, the State of South Carolina will have one of the greatest sources of hydro-electric supply in the world, and the size of the project and the fact that it will furnish steady power cannot help but excite world-wide interest and attract new industries to this section.

"We intend to do everything in our power to contribute to the future prosperity of the State of South Carolina, and we feel that with the people of the State back of us we can attract large amounts of capital, which will further advertise the resources of that part of the country."

Increased Crop Values in Texas.

Of the 28 listed crops produced in Texas there was a gain in value of over \$100,000,000, or nearly 18 per cent, in 1926 compared with 1925, and this increase in crop values was obtained in the face of the low price prevailing for cotton during the latter part of the season.

The total value of Texas' crops in 1926 was over \$675,000,000, as compared with \$575,000,000 in 1925.

The area of the crops reported amounted to 29,635,000 acres in 1926, or an increase of 3,909,000 acres over the previous year. Cotton, which was produced on 18,363,000 acres in 1926, a gain of 755,000 acres over 1925, represents about 60 per cent of the total crop acreage, not counting the area devoted to fruit and nut growing and other miscellaneous crops not given in the 28 listed.

In the monthly digest, "Texas Business," published by the Dallas Morning News, the Dallas Journal and the Semi-Weekly Farm News, attention is called to the fact that the values given are based on prices paid to farmers as of December 1. However, the bulletin states that in 1926 there was a steady decline in most prices prior to December 1 and the Government estimate is in many cases too low. For instance, it is pointed out that the cotton market was at a low ebb on December 1 and many cotton farmers sold their cotton for 16 to 18 cents early in the season, and the estimated value of \$318,000,000 for the cotton crop is too low, and similarly the corn market was at low ebb on December 1.

A further fact should also be considered, states the bulletin, "In computing the value of Texas feed crops. The price that is usually paid the farmer in the autumn is appreciably less than that he pays during the following spring and summer if it is necessary to go into the market and buy his feedstuff during the growing season. For example, the Division of Crop Estimates places corn at 60 cents a bushel in arriving at a total value of \$64,118,000 for the State. However, had the farmer not grown the corn, it would probably cost him \$100,000,000 or more. Since only about 25 per cent of the average corn crop is sold on the market, this factor is noteworthy. Further, this factor is noteworthy in drawing a parallel between 1925 and 1926, for the farmer had to buy most of the feedstuff required during the cotton-growing season of 1926."

\$600,000 Women's Hotel for Atlanta.

Atlanta, Ga.—Plans have been announced here for the erection of a \$600,000 hotel or residential clubhouse for women, at Piedmont avenue and 12th street, by the Atlanta Women's Building Corporation, Mrs. M. B. Clifton, secretary, and A. J. Willson of Cleveland, Ohio. The structure will be of Colonial-Georgian design, five stories, the four upper floors to contain 204 rooms, while the lower floor will combine hotel and home conveniences. Burge & Stevens of this city are the architects.

\$6,000,000 HOTEL FOR BALTIMORE.

16-Story Building to Contain 700 Rooms—Completion in Spring of 1928.

According to an announcement by Harry E. Karr, local attorney, plans are being worked out for the erection of a \$6,000,000 hotel on the site of the Convent of the Visitation, at the corner of Howard and Center streets, Baltimore. The announcement, it is said, marks the completion of negotiations which have been carried on for several months, with Baltimore, Pittsburgh and New York capitalists promoting the project.

The building will have a frontage of 200 feet on Howard street, 150 feet on Center street and will be 16 stories high. Of a total of 700 rooms, it is said, 667 will be bedrooms, each equipped with bath. The lower floor will be chiefly devoted to stores, while a banquet hall and ballroom, two stories high, will occupy the entire third floor. The new hotel, to be called the Lord Baltimore, is expected to be completed in the spring of 1928.

In addition to Mr. Karr, other Baltimoreans interested in the enterprise include James Bruce and C. W. Hendley.

Engineers Public Service Company Subsidiaries in Several Southern States Expanding Facilities.

Large increases in consolidated gross and net earnings are shown by Engineers Public Service Company in its annual report for 1926, issued to stockholders last week. Gross earnings were \$26,627,687, an increase of \$3,518,750 over the figures in the previous annual report, and balance available for reserves and the 778,938 outstanding shares of Engineers common stock increased 25.97 per cent to \$3,183,879. The company reports, in addition to the acquisition of Baton Rouge Electric Company, net increases in plants of its subsidiaries totaling \$15,077,000 and the reinvestment of \$3,391,455 of earnings in the properties.

The subsidiaries serve a population of 1,176,100 and have total generating capacity of 259,800 kilowatts, with output in 1926 of 637,474,000 kilowatt-hours. During the year the Virginia subsidiary has extended its transmission lines into a large section of Northeastern North Carolina, doubling the area served, and has co-ordinated its transportation service by obtaining new franchises. The Eastern Texas Electric Company has completed the initial installation of 25,000 kva. in a new power station and extended its lines into a large portion of Southern Louisiana. The increased earnings of the El Paso, Savannah and Key West properties also reflect the healthy growth of industry in the territories served.

Tunnel Contract on \$13,000,000 Power Development—North Carolina Project to Have Generating Capacity of 75,000 Kilowatts.

In a letter to the MANUFACTURERS RECORD the Phoenix Utility Company of New York city, who are handling the construction of the Waterville hydro-electric development on the Pigeon River, in North Carolina, for the Carolina Power and Light Company of Raleigh, advise that contract for the proposed tunnel in connection with the development has been awarded to Parker, Graham, Sexton, Inc., of Paterson, N. J.

As previously announced, the development will have an initial installation of 50,000 kilowatts capacity, and will be designed and partially built for an ultimate generating capacity of 75,000 kilowatts. It is said that the tunnel will extend through the Smoky Mountains for a distance of three miles and will cost in excess of \$2,500,000, while the entire development will involve an expenditure of \$13,000,000.

Singing the Praise of Texas Climate.

By WELLINGTON BRINK, Dallas.

When my brother in Cleveland is separated from his garage by snow five feet deep, I'm covering hundreds of sunshiny Texas miles in my car, coatless and carefree.

When my brother in Minneapolis is keeping the furnace roaring, I'm working at my desk beside an open window.

Back of the awe-inspiring buildings of the Lone Star State, above the marvelously productive soils, roundabout this industrious race of developers called Texans, is a resource that is worth inestimable billions.

Where is the financier, where is the statistician, where is the economist, where is the census bureau that can compute the value of the incomparable Texas climate?

Frequently, and truly, it is said that America owes a large part of her unparalleled prosperity to the motorcar. "Good times" in the United States goes about on rubber tires. Industry and agriculture ride in automobiles and are happy.

But up yonder where the frost nips, ears freeze, ice forms thick, snow falls, toes benumb, and the days are cloudy and damp and the winter outstays its welcome—up in the polar-bear region of New York and Ohio and Michigan and Indiana—a good car goes wrong in its own garage. Tires deteriorate from sheer exhaustion while waiting to work. Batteries give up the ghost in futile attempt to turn stiff and stubborn motors. About five thousand a year is the average mileage of one of these unfortunate cars operating under winter handicaps. Look, on the other hand, at the antics of the frolicsome Texas automobile, which makes 9000 or more miles every 12 months. And such miles and such cars as they are! Texas cars are strict Volsteadians—they require little or no alcohol.

A Texas law requires a muffler for every little roadster, every fat limousine, but not out of fear of colds or pneumonia. No, indeed; the muffler is for the purpose of suppressing the natural whoops of happiness coming of good roads, perfect weather, a cloudless blue sky, gorgeous sunshine and roadside flowers and songsters.

Texas is no exception to the automobile-and-prosperity partnership. Here, indeed, the partnership never goes into hibernation, never suspends, never dissolves for a season. All year long pleasure cars and business motors, trucks and buses, chug and whirl and honk and whiz. Gasoline flows in at one end and dollars pour out at the other. More than a million licensed vehicles coin their quotas of wealth 365 days in the year with greater regularity than the United States mint. It is the advantage that Texas climate gives to honest working cars that is largely responsible for this State passing so many of its contemporaries on the road to industrial, agricultural and trade supremacy.

In other respects than automobiles Texas temperatures read by dollars as well as by degrees. The laboring man has work the year round. There is no cessation of building projects because of excessive cold. There is no discomfort for the outdoor worker. Fuel and clothing costs are sliced in two. Fewer calories per day are required to keep the human body functioning.

At this point we collide briskly with the health factor of the wonderful Texas climate. Instead of seven, eight or nine months of fresh air and sunshine, Texans enjoy a full year of purest ozone. New babies, young children, people of every age, drink in the crisp, zestful, invigorating Texas oxygen 364 days between birthday cakes and sponge up ultra-violet rays with prodigal freedom. There is no confinement behind storm windows, no shivery hugging of stoves. In Texas Old Sol paints his landscape golden and Jack Frost is a rare intruder on the canvas. The youngster crop has a long

growing season, and children make all outdoors their regular nursery. Doctor bills are given a knockout blow by the best M. D. ever known, the smiling Texas climate.

One of the reasons for the viciousness of the wallop handed ordinary practitioners is the vitamine family. This vitamine family is a peppy bunch in Texas, for it romps among fresh vegetables, juicy fruits and rich milk. Texas pastures are always green. That is why Texas cows are so comparatively free from tuberculosis and other diseases propagated in winter-closed barns of many sections of the United States.

Spot a Texas lassie and sing the words of the old song, "Mary, Mary, quite contrary, how does your garden grow?" and she is sure to trill back the cheerful answer, "Very, very well, sir." For in Texas the garden seasons number four, with no intermissions between.

Chock-full of vitamins, it is perhaps natural that the he-males and the she-males should feel an impulse to punch somebody, or something, a terrific and joyous punch. The victim more often than not is a luckless golf ball.

Of late years exposure to the incomparable Texas climate has caused an extensive breaking out of golf links. All over this vast State, from Texarkana to El Paso, clubhouses have popped up, and the click of driver on pellet has become like the rapid ticking of an alarm clock. This rapid ticking, or clicking, is calling thousands of potential rheumatics to the fairways at five in the morning. It is saving countless scores from the fate of an innocuous desuetude.

It is rumored that certain other States, statistically minded, are given to talking about their "mean" temperatures. Texas, thank goodness, has no "mean" temperatures. For the most part she is distinctly sweet-tempered and sweet-temperated. Her ups and downs are comfortable flights. There are a good many steps between the highs and lows of the Panhandle and the highs and lows of the Rio Grande Valley, just as Texas altitudes vary by thousands of feet. Every Texan to his own taste, with temperatures as with soils and rainfall and topography. Texas is lavish in the variety of its blessings.

If you want an average January temperature of 55, a whopping big chunk of Texas is ready to serve you. If you have a hankering for an average July reading of 75, this same wonder State can fill your order perfectly. If you have in mind a dream of summer nights fanned by a cool Gulf breeze, you need not be particular as to the place in Texas where you shall lay your head. Nearly anywhere, if you retire early, 9 o'clock will see you reaching for a blanket.

When it comes to climate Texas is entitled to enjoy a superiority complex. No sunstrokes. No chilblains. Vast coast line, yet few severe storms. A summer resort, a winter resort. Flowers in January. May in December and June in August.

Texas climate has gone too long unheralded to the world. It can be fully appreciated only by the traveler who has lived in many climes, who has dwelt in tropics and in blue-nosed North alike, who has vainly sought the happy medium—until he has found Texas.

Contract for \$250,000 Church Addition.

General contract has been awarded to the Tase-Norris Company, Inc., of Baltimore for the erection of a proposed \$250,000 addition to St. Mark's Methodist Episcopal Church at Garrison boulevard and Liberty Heights avenue, Baltimore. Clyde N. & Nelson Friz, Baltimore, are architects for the improvements.

Texas Extending a Hearty Welcome to Manufacturers.

NO DECREASE IN COTTON ACREAGE ANTICIPATED BY LEADING COTTON MEN.

By FRANK GOULD.

[Frank Gould, first vice-president of the Manufacturers Record, and Mrs. Gould are motoring through the South from Baltimore to the Mexican border line, largely for rest and recreation, but Mr. Gould is, as always, keeping his eyes and ears open and his brain at work. Against his will he has been persuaded to give his impressions of what he sees.—Editor Manufacturers Record.]

Dallas, February 19.

According to the views of men with whom I have talked during the last several days, the idea that the South's production of cotton will ever be permanently reduced is a fallacy. On the contrary, they think it will increase. It is not thoughtless comment from uninformed people, but comes from those closely in touch with the situation and who have contacts which apparently enable them to judge accurately of the sentiment among farmers and among business men dealing directly with cotton growers. This observation, it is true, refers particularly to the Southwest, but comment in Georgia and Alabama and Mississippi confirms it to some extent.

A. C. Beane of Fenner & Beane, one of the best informed cotton men of the country, whose firm I understand has offices in perhaps fifty cities, told me, "Nature intended cotton to grow in the South. A reduced acreage may possibly be planted one year as compared with another year, but it is my judgment as a definite outlook for the future we will have bigger crops of cotton instead of smaller ones." Such observers as John W. Carpenter, vice-president and general manager of the Texas Power and Light Company of Dallas, who grew to manhood on a cotton farm, expressed a similar opinion. It is fair to say, I believe, that Dallas business men generally are of that mind. Colonel Holland of Farm and Ranch, a recognized authority throughout the Southwest, and W. D. Trotter of the machinery house of Briggs & Weaner, so expressed themselves.

We will have to admit that Texas has less reason than some other States to be disturbed about overproduction. *At present prices some Texas cotton farmers are making a profit.*

How do they do it? Cotton plantations in Texas are much larger than in other States. The average, I believe, for this State is over 100 acres. A large section of the State is not affected by the boll weevil, but best of all, besides their wonderful soil, their land "lays" so and their operations are on such a scale that these successful growers plow and plant and even harvest by mechanical means. So the effort of Texas is today to get factories and to increase the uses of cotton instead of trying to decrease acreage. Apropos of this I recall a statement made to me by Mr. Beane, whom I quoted above, in a conversation I had with him in New Orleans. He said, "If the South would use cotton bagging to cover its bales instead of jute, there would be used by this one means alone 200,000 additional bales, and the farmer would be just as well off." Perhaps Mr. Beane will have more to say about this in the MANUFACTURERS RECORD in an article of his own, which I asked him to write. It would offer a very interesting subject for discussion. They are preaching a doctrine of more of everything that has cotton in it.

The Texas Research Society, at a recent dinner in Dallas, had presented to its members truly astounding facts of what Texas can offer manufacturers in almost every line. It is not only the manufacturer of cotton goods who is being invited to come, but those who use raw materials and minerals of nearly every kind in their output. The field for chemical plants seems to be especially inviting. Texas is paying millions to bring back for the needs of her people manufactured

products using Texas sulphur and soda as a base, products which can just as well be made here. Iron, kaolin, zinc, asphalt are only part of a long list of things which are found in great quantities in this great State. Its lignite and coal and oil will supply the fuel.

What a change a few years has brought about! It cannot have been 20 years ago since more than one prominent railroad man stated in my hearing, "Why talk of factories for Texas? Texas will always be an agricultural State." The attitude of the people of Texas toward outside wealth and factories and corporations has changed greatly during these years. It is not necessary to go into that. Texas invites now—and she has great reason in what Nature has given her for the invitation she is extending. Her promises to those who come will be fulfilled. It is a marvelously endowed State. An endowment of men and of soil and climate. And the Rio Grande Valley is still to be seen.

Seeking to Broaden Texas Fig Market.

Alvin, Texas, February 28—[Special.]—Although steps have been taken to standardize the pack and create a wider market for the figs that are grown in the middle coastal district of Texas, the growers are facing the problem of how this year's prospective production of 25,000,000 pounds can be taken care of. In discussing the situation, T. L. Waugh, who is largely interested in the industry, said:

"As an industry we were confronted with 9000 acres of producing figs in 1926. This acreage was capable of producing more than 18,000,000 pounds of figs last year.

"We have in the territory 17 preserving plants, which packed approximately 8,000,000 pounds of preserves last season. Through inadequate facilities and inadequate finances the balance of the crop was a total loss.

"It is needless to say that the present preserving equipment is insufficient.

"What is the reason for all of this? It is not that figs fail to produce, for there is no surer crop. The return on the manufactured product has uniformly been good. The answer is simply undercapitalization.

"A larger problem awaits us in 1927 than ever before. In 1924 and 1925 much additional acreage was planted. We find an additional 3718 acreage coming into bearing this year. There are now 12,718 acres two years old and up, capable of producing 25,000,000 pounds of figs this summer."

Texas Almanac for 1927.

The Texas Almanac and State Industrial Guide for 1927 has been published by the Dallas News and is, as usual, a most valuable compendium. It has nearly 400 pages abounding with information of all kinds concerning the Commonwealth, and it is truly, as the title page says, an encyclopedia. This handbook will be appreciated by business men and others, and it is, moreover, a textbook for the use of students either in or outside of schools and colleges. It was first published in 1857, being then called "The Texas Almanac and Immigrants' Guide." There is an inset map of the entire State and also a general index to the contents.

A New Spirit in the South.

By FRANK GOULD.

Austin, Texas, February 21.

The best way to see a State or a section is to travel by automobile. My friend, L. W. Baldwin, president of the Missouri Pacific Railroad, wrote me as I was leaving home, "I note with sorrow your plan to travel over Texas by automobile." Since then I have seen the figures of earnings of this great carrier of the Southwest and I refuse to believe, in view of their total of car loadings, both in and out of this region, that two lone passengers would make very much difference in a sum of receipts that is so gratifying to everyone who knows the splendid work the road is doing in every section it traverses. Of course, Mr. Baldwin was joking, and so am I in referring to it, but it gives me an opportunity to speak of the work this great developer is doing and to wish he was with me to see as I see, and have been seeing for a month past, the marvels of a great land in what President Wilson used to term an "intimate" way.

I have traveled through the South for 30 years, and quite naturally on this trip, which is my second one by motor, I am comparing the South of 30, 10 and even 5 years ago with the South of today. That there has been a great change every observing person admits. In what does it consist? And what has brought it about?

The first question may be answered, it seems to me, by saying there is a new spirit in the South, and I define that to myself by saying, "The Southern people themselves are coming more and more to believe they actually have the things that make life more worth while than any other section and the things which are the foundation for great business enterprise and, therefore, great material progress." In other words, a different outlook from former times. A man, a city or a nation is what he or it is and will be according to his or its outlook.

That is what the nations of Europe lack. They haven't our view of life or of greater success in the years to come. In material things they believe they can capture world markets and sell their commodities by means of a cheaper price than the other fellow, hence they try to beat down to a breaking point the price of everything they buy and pay the lowest possible wage. The result is found in the miserable way in which their working people live and too often in despair on the part of the producer when he views without understanding the conditions under which American working people are happy and acquiring means for their old age. A book could be written on this, but I am digressing.

The "outlook" before the South is to make it the greatest manufacturing region of America, and the Southern people are beginning to believe this can be done. They didn't always and maybe all of them don't now, but they are coming rapidly to that view. So we have a new spirit—a new faith. As to what has brought about this great evident change in Southern development modesty prevents me saying a great many things about the MANUFACTURERS RECORD in our own columns (and Mr. Edmonds might cut it out, although it seems to me 45 years of work following the ideal he has followed counts for a great deal), so I will pass over that and call attention to the fact that the wealth of America has now reached the wholly incomprehensible figure of \$400,000,000,000.

Whatever idea this stupendous sum conveys to the average mind, our thought at once comes to the front. How is it finding investment? It is reported that Henry Ford refused a billion in cash for his business. If he had accepted the offer,

his span of life, whatever it may be, would be too short to enable him to invest the money.

This great wealth of ours in seeking new fields and new investments finds the South. It finds a South ready and waiting and investing its own money, which it has been making of late years, and thus proving its faith in the value of what it offers others. The politicians reading the handwriting are not as clamorous for the blood of capitalists—a word they used to spell with a capital C when they weren't calling every man of means "predatory rich." So laws are finding their place on the books of Southern States that invite the men of money and energy to come and help develop this heaven-favored land. All of this is part of the new spirit, and coming at a time when money is seeking investment we can account for a great many things we have seen from Maryland to Texas.

First and most outstanding in our particular case, we have traveled so far 2500 miles from Baltimore to Southwest Texas, over highways that, although a little rough in some places, have not caused us one minute's delay. A bridge over a small stream was "out" at one place, but that was because a torrential rain of six inches in 12 hours had given the stream the volume and force of a mighty river. Even there a pair of mules was waiting to pull us across, so we were not delayed. And the roads we traveled during such an unusual rainfall were in splendid shape. A number of States, though, are not marking their roads adequately. Maybe I will have something to say about this later on. North Carolina and Texas seem to me to be better than the rest, and North Carolina says with a great deal of truth, "It is harder to get lost in North Carolina than it is to find your way in other States."

The roads are a little rough at times, but I have found none that were not easily traversable, and here in the great plains of Southwest Texas are as fine hard-surfaced roads as are to be found in any of the populous States of the East, and I have been over them all. And in the hotels what a change has come about! Comfortable, clean, modern hotels in almost every town. Surely this is a very potent manifestation of the new spirit.

Traffic everywhere is handled by automatic signals, and in every city the people, the pedestrians, scrupulously observe the law and only cross the streets when the signal permits.

The cities are uniformly paved in the most modern way. Boulevards and parks everywhere are found that compare favorably with those of the great world capitals. And for their amusement in this Southern country, where low-priced cotton is thought to have brought disaster, we have found moving-picture theaters that cannot be surpassed anywhere, some costing as much, it is said, as \$2,000,000.

We have seen double-tracked railroads that extend for hundreds of miles into the South's center. Power-transmission lines everywhere. Yesterday the Texas Power and Light Company, whose headquarters are in Dallas, told me their lines measured 3000 miles.

And as I came down the road from Dallas to Austin over a perfect concrete highway at least 19 or 20 feet wide I had at my left hand the heavy rails and magnificent rock-ballasted roadbed of a most modern interurban electric railway, while on my right were the tall spider-like towers of the power line taking light and power into the far places over these prairies. My vision was only limited by the horizon, such are the distances here, and as I looked across great fertile plains, with the air as clear as crystal, I saw a smiling land, every inch of it apparently being cultivated, and I thought truly a new spirit has come upon the South.

Discriminating Tax Burdens Upon Manufacturing in North Carolina Should Be Removed.

Hunter Marshall, Jr., secretary and treasurer of the Cotton Manufacturers Association of North Carolina, Charlotte, makes the following statement setting forth the position of cotton-mill men with regard to the tax situation in North Carolina:

"There has been an apparent disposition upon the part of a number of individuals and a very few newspapers of the State to give the impression that the cotton manufacturers are seeking to be favored in the matter of taxation in North Carolina. The plain truth is that they are striving to have removed the discrimination in taxation against them which exists today.

"Any fair-minded man who will take the trouble to investigate will find that not only the cotton mills but other corporate interests in North Carolina are discriminated against at present. A cotton mill in Mecklenburg county, for instance, must not only pay the county tax upon the appraisal valuation upon its property, and a city tax if it is in the city, but it must also pay a large franchise tax to the State, and, in addition to that, it must pay another State tax of 4 per cent upon its net income, and besides all this a Federal corporate income tax of 13½ per cent. This, of course, applies to other corporations as well as to cotton mills. No other owners of any type of property, however, are required to assume any such tax burdens.

"The Federal corporate tax of 13½ per cent, of course, is levied throughout the nation, but in only a very few States is a double State tax levied upon manufacturing enterprise. Unprejudiced experts from outside the State, after careful study and analysis of the tax systems of all of the States of the Union, have stated that the tax burdens upon manufacturing interests in North Carolina are greater than in any other State, without a single exception.

"North Carolinians who are interested in attracting capital and industry from other sections must realize, as Governor McLean and some members of the legislature have come to realize, that taxation has come to be in a way a competitive proposition as between States. It is a well-known fact that a number of other Southern States, as well favored with natural resources as North Carolina, impose no income tax at all upon manufacturing and other corporate interests. These States are making a direct and very effective bid for new industries and capital, both of which will build up the taxable wealth of these States and promote their general prosperity.

"The patriotism and the public spirit of the cotton manufacturers of North Carolina cannot be questioned. No group of men in the State have done more for the economic and social betterment of our people than they have. In the really prosperous times when the present State taxes were first imposed they did not kick, because at that time they were able to bear the burden without serious inconvenience. Under conditions that have existed during the past two or three years, however, this tax burden has become a matter of serious moment to them. Numerous cotton mills in the State have paid considerably more in taxes in the past two or three years than they have paid to their stockholders. In fact, many of them have paid their stockholders practically nothing and a few have actually fallen by the wayside.

"The manufacturers do not feel that the people of North Carolina would consciously do them an injustice and at the same time work an injustice upon the community as a whole. It has been for this reason that a number of representative manufacturers in North Carolina have spoken out that the people might know what the situation is and insist upon such adjustments in our tax system as will remove the discrimination and injustice. The tax discrimination and injustice,

without any question at all, is putting the brakes upon industrial development and progress in North Carolina.

"The impression prevails among our people that the members of the legislature are earnestly and honestly tackling this problem of taxation, and it is felt that, this being the case, some sort of relief is assured. The manufacturers of the State are glad to see the members of the legislature and Governor McLean attack the problem of county government, because, as is well known, a part of the trouble lies in extravagant systems of county administration which result in high local taxes."

Consolidation of Six Georgia Public Utilities Companies Completed.

Atlanta, Ga., February 28—[Special.]—Consolidation of six Georgia public-utility companies into the Georgia Power Company has been completed with the issuance of a charter to the new company, which begins operations at once. Simultaneously with the granting of the charter the Georgia Power Company acquires title to and control of properties formerly operated by the Athens Railway and Electric Company, Georgia Railway and Electric Company, Georgia Railway and Power Company, East Georgia Power Company, Rome Railway and Light Company and the constituent Georgia Power Company, the last named including properties formerly belonging to the Athens Gas Light and Fuel Company, Georgia Southern Power Company, Georgia Utilities Company and Milledgeville Lighting Company.

In addition to the above companies, subsidiaries of the new company include the Central Georgia Power Company, Macon Railway and Light Company and Macon Gas Company, serving the Macon district; the Mutual Light and Water Company, operating in Brunswick, and a number of others.

Officers of the new company include H. M. Atkinson, chairman of the board; P. S. Arkwright, president; G. W. Brine, Charles G. Adsit, F. L. Butler and F. P. Cummings, vice-presidents; W. H. Wright, secretary; I. S. Mitchell, Jr., treasurer; F. R. Mitchell, assistant treasurer; B. T. Simpson, assistant secretary, and Stephen A. Dawley, assistant secretary. With the exception of Mr. Cummings and Mr. Dawley, who reside in New York, all of the officers are of Atlanta, where the principal office of the company will be located, with district offices throughout the State.

Formation of the company is expected to have a far-reaching effect on the future industrial and agricultural growth of Georgia, as by bringing together many small companies into one large company it will enable every community to provide an abundance of electrical power for whatever purposes desired. The company will provide service to users of electric power and light, gas for lighting, heating and industrial purposes, electric transportation service, steam heat, and also will operate retail stores to sell electrical and gas appliances. It will supply service to about 180 Georgia cities and towns, to be connected with high-tension power lines.

It is estimated that \$10,000,000 of new capital will be required each year for improvement and expansion of the company's service.

Contract for \$800,000 Tulsa Building.

The Manhattan Construction Company, Muskogee, Okla., wires the MANUFACTURERS RECORD that it has been awarded general contract for the proposed Medical Arts Building at Tulsa, which will be 11 stories, 50 by 140 feet, of reinforced concrete. The structure is being erected by the Tulsa Medical Society, in which Dr. C. W. Day is largely interested, and is estimated to cost \$800,000. A. M. Atkinson of Tulsa is the architect and Horner, Wyatt & Roads of Kansas City, Mo., engineers.

Chemical Research Opening Up Vast Possibilities in Naval Stores.

NAVAL STORES MEN IN GET-TOGETHER CONFERENCE IN JACKSONVILLE.

By RICHARD WOODS EDMONDS, Staff Correspondent.

Jacksonville, Fla., February 25.

One hundred and seventy-one naval stores men from many States spent February 21 to 23 at the fourth annual Get-Together Conference of the industry and allied branches in Jacksonville. The conference included representatives of consumers of naval stores, as well as the landowners and producers of naval stores, and many common problems of production and marketing were threshed over. Co-operation between producer and consumer, to the end of higher trade ethics and elimination of practices objectionable to one or the other side in the marketing of the products, was the keynote of the conference. Thus the naval stores and allied industries are keeping abreast of the most advanced thought in business practice and ethics.

During the discussions the point was brought out that we here in America can scarcely appreciate how greatly the naval stores and other industries have progressed in this field of co-operative practice until we contrast conditions in our industrial life with those abroad, but John N. Van Der Vries, manager of the North-Central Division of the Chamber of Commerce of the United States, in his talk on Monday evening, brought out the contrast when he quoted an English delegation as saying: "The reason that America is so prosperous above all other nations is because in America business men are willing to work together in organizations for their common welfare and for the welfare of their country. In America men are willing to sit around a table and tell each other the secrets of their business in a way that no Europeans would ever think of doing. It has been due to this willingness on the part of American business men to talk over common problems that America today is in the position in which we find it."

This, Mr. Van Der Vries explained, was the second item in the report made by the labor leaders sent to this country by the London Daily Mail to discover the secret of America's amazing prosperity. Mr. Van Der Vries considered this co-operation so excellent a thing that he urged the naval stores men to carry it much further. We have progressed far from the old days of bitter enmity between competitors; we have advanced beyond the days of enmity between buyer and seller, and have begun to realize that both have a common interest, and that what hurts one hurts the other; but we are still pioneering in this advance. As our earlier pioneers, armed with rifle and axe, flung back and ever back the frontiers of occupied land, so today the pioneers of industry, armed with a great, new conception, are flinging back the borders of business amity and co-operative effort to the immense mutual advantage of all concerned. But the new conception is far from universally accepted, however far ahead we may be in this respect of European business. The rank and file of American business must follow the lead of the pioneers in this field, argued Mr. Van Der Vries, and he stated the points in his arguments laconically and drove them home with logic and force. Said he:

"The first point I want to bring to you is this: that organized business is worth while because it has a dollar-and-cents value to every man who engages in it."

The time has passed, he argued, when we could grow wealthy by the simple process of grabbing off some natural resource lying loose. We are in an age of synthetic products better than the natural ones; of intense competition between

groups, as that between the naval stores, on the one hand, and the producers of substitutes therefor, on the other hand, with victory going too often to the most strongly organized group rather than to the one with the best product.

The Tuesday morning session was devoted to an open-forum discussion of the problems arising between producers and consumers of naval stores as related above. Soap and paint men presented their grievances in a spirit of friendly request for fair play and in the shape of carefully reasoned arguments. The producers received them with open minds and freely discussed ways and means for eliminating practices that have grown up gradually under old conditions, without objection from anybody, but which, under present-day conditions, constitute hardships to be removed by careful planning and co-operation.

Tuesday afternoon was given over to a meeting of the Pine Institute of America, including potential members as well as members. Carl Wernicke, secretary of the Pine Institute, read the report of the President, O. H. L. Wernicke. The report briefly reviewed the history of PIA from its inception at the Get-Together Conference in 1924 to date, and it showed that in spite of a woeful lack of co-operation from a majority of the producers of pine-tree products, the Institute is now on a sound financial basis and is functioning on a small but highly useful scale, and revealed the large possibilities for growth and useful service that lie open to the Institute as the backward members of the industry grasp its value and add their support to that already given.

The report restated the foundation on which the Institute is based—the most advanced conception of co-operation between all interested in naval stores, either as landowners, as producers, as middlemen or as consumers of the products. The present membership is composed of the representatives of these varied groups. Divided into seven classes, they are: Owners of pine lands, producers of pine gum, factors, dealers, D. D. woods producers, steam-wood producers and miscellaneous, the last including bankers and consumers. Total membership so far is 267 and annual revenue is estimated at \$39,100. Possibilities for increase in membership and revenue are indicated by two facts: First, only 12 per cent of producers are members. This 12 per cent represents only 25 per cent of the production. Yet revenue from this class is \$15,250 annually. Could 75 per cent of production be secured, the revenue from this source alone would be \$45,750, or considerably more than the total revenue now. It is reasonable to suppose that as the benefits of the Institute become evident, membership will gradually increase. The second fact referred to is that in conversations with several members they emphatically expressed the opinion that the basis of membership dues should be changed to increase the revenue from each member, as the object sought is well worth the increased cost and it could be borne without difficulty.

The report brought out also the fact that PIA is going ahead as rapidly as its limited revenues will permit, with chemical research into the nature of and uses for naval stores. Two fellowships at the Mellon Institute of Industrial Research have been established, one for rosin and one for turpentine, Glenn H. Pickard engaged as chief chemical advisor, and significant results have already been obtained. A rosin soap in which the rosin content had been increased to double that ever possible to use before was exhibited at the

meeting, and, while the product is still in the laboratory stage and nothing definite can be said for its commercial possibilities, it is believed that a good future lies ahead of it. All the chemists reporting—Dr. E. R. Weidlein, director of the Mellon Institute; I. H. Odell, industrial fellow engaged in the research on turpentine, and Glenn H. Pickard—were enthusiastic and emphatic in stating that as they have progressed in their work on pine and rosin they have been astonished and delighted at the immense potentialities that seem to open out before them. As yet scarcely anything of a scientific nature is known of these chemicals, so completely has science ignored them, but it was said that few, if any, other raw materials known, save possibly the coal-tar products, are so complex or hold out promise of such diversified values.

Dr. Charles H. Herty, chemical advisor of the Chemical Foundation, Inc., and for many years a recognized authority on turpentine production, made a very effective talk on the necessity for research into the fundamental nature of turpentine and rosin, and the manner of their production in the microscopic rosin ducts of the pine tree. When the manner of their production is understood, Dr. Herty said, we may be able to greatly increase it in a highly profitable manner, or even to vary the production of rosin in relation to turpentine, according as the one or the other proves to be the more valuable.

The Wednesday morning session included a symposium on forestry, with Dr. Austin Cary, well-known logging engineer of the United States Forest Service, as the principal speaker. Dr. Cary estimates that there are 115,000,000 acres of land in the South suitable and actually available for the growth of pines. But by no means all the land available will be so used. If we cut the figure down to 55,000,000 acres, we could secure, with good management, over 2,000,000 barrels of spirits of turpentine alone. This does not take into account the resin and the timber. In 1905 the South produced 750,000 barrels of turpentine, while in 1925 it produced only 500,000 barrels. Dr. Cary considers it likely that this figure will shrink considerably before it will grow, for while, with good management, we should be able to maintain our present production, we are not improving methods of management rapidly enough to secure this desirable end. However, improved management in many places has already added two years to the life of the trees, and methods are improving.

A very significant development in the industry is the fact that throughout the entire turpentine belt hundreds of operators, large and small, are buying up pine lands and bringing them under scientific management for turpentine and timber or pulpwood, with a view to maintaining perpetual operation in one place instead of following the crops in the nomadic fashion that has prevailed in the past and still does prevail to a considerable extent.

The conference adjourned without naming successors to O. H. L. Wernicke, president of PIA, and Carl Wernicke, secretary. Both declined to serve again, but will continue in office until the trustees elect their successors.

Demand for persistent, thoroughgoing chemical research, improvement and increase of the statistics supplied by the Federal Government on consumption of naval stores and other improvements in the practices of the industry were covered in resolutions passed at the closing session.

It was the opinion of many, if not of all, of those at the conference that a great future is possible to the naval stores industry if it will but grasp its opportunity. But that opportunity, it was emphatically stated and reiterated, lies in thorough research on a large scale and finally, when results justify it, liberal and well-planned advertising. Today the industry, from start to finish, is conducted in a primitive fashion worthy of a past century. From the growing of pine trees to the marketing of highly refined and diversified prod-

ucts it must be revolutionized. It does not seem possible that the naval stores industry as we know it can long survive. Neither does it seem possible that the progressive men in its ranks will continue with the standards now accepted. A new and greatly changed industry must rise from the old and supply the world with products of which it does not yet dream. The Pine Institute of America is the logical instrument by which the industry is to be remade.

\$3,000,000 Building at Tulsa.

Tulsa, Okla.—The Harwell Building at 4th street and Boston avenue, this city, has been purchased by the Exchange Trust Company and it is the purpose of the latter to use the site in connection with the erection of its new building as reported in the MANUFACTURERS RECORD last week. This transaction will necessitate a change in plans of the company for its new building, it is said, and instead of erecting a \$2,000,000 structure as announced, the building will cost approximately \$3,000,000. It will have a frontage on Boston avenue of 135 feet and will be 60 feet wide, with an L-shaped extension on the lot immediately south of the present building.

The proposed extension will continue west to the alley, providing work and lobby space through the entire block from 3d to 4th street, with entrances on each side. The lobby will be spacious and will extend for a distance of 300 feet. It will be a connecting link between the two streets and will enhance the impressiveness of the new building. Details as to the height of the proposed structure and the type of architecture to be employed have not been determined. It is thought that preliminary plans will be completed within ten days. The Weary and Alford Company of Chicago are architects and engineers.

Contracts for Tallassee Dam Equipment.

Birmingham, Ala.—Contracts have been awarded by the Alabama Power Company for generating equipment for its Upper Tallassee dam expansion, now under way on the Tallapoosa River. Two reaction-type hydraulic turbines of 25,000 horsepower each, for delivery beginning September, 1927, and ending February 1, 1928, were ordered from the I. P. Morris Organization of Philadelphia, and two generators of 25,000 horsepower each from the General Electric Company of Schenectady, N. Y. The first of the generators is to be shipped January 1, 1928, and the second on February 15, 1928.

As previously announced in the MANUFACTURERS RECORD, the dam will be increased in height from 37 to 56 feet, while the power plant will be increased to an initial capacity of 50,000 horsepower, with provision for an additional unit of 25,000 horsepower, making the ultimate capacity of the plant 75,000 horsepower. All work is being handled by the Dixie Construction Company of Birmingham, a subsidiary of the power company.

Varied Output of Louisiana Dehydrating Plant.

Westwego, La., February 26—[Special.]—The Bussler Industries, Inc., organized to dehydrate vegetables and other foods, began operation of a plant of 20 units here several months ago and expects to steadily increase its capacity. The supply of fresh vegetables is drawn from truck farms, of which there is a big acreage near by. The plant will specialize in the manufacture of mixed soup vegetables, spinach, carrots, okra, onions, string beans, white potatoes, pumpkin and powdered horse radish. Its entire output will be sold through Bussler Distribution, Inc., of New Orleans, which also sells the output of other Bussler plants.

Georgia Sets a Pace for Every Other State for Diversified Agriculture.

A STATE-WIDE MOVEMENT WHICH IS BOUND TO BE A WONDERFUL STIMULATION TO ALL CLASSES.

[Special Correspondence Manufacturers Record.]

Atlanta, Ga., February 24.

In a big drive, launched this week officially by proclamation of Governor Clifford Walker, the human, industrial and commercial resources of Georgia are being marshaled as never before behind the Georgia Association's diversification plan, to the end of placing the State's agriculture upon a basis of prosperity such as will be reflected and felt in every line of endeavor in the Commonwealth.

The proclamation of the Governor designates the week beginning March 7 as "Cow-Hog-Hen Week," during which organized agricultural forces, official and non-official, of the State, various chambers of commerce, boards of trade, civic clubs, women's organizations and every citizen are asked by the Chief Executive to join forces in one great State-wide cohesive movement to promote a more dependable system of farming throughout the State, with the dairy cow, swine and poultry at the bottom of it.

The Governor, who long has been a leading advocate of diversified farming as against the time-honored all-cotton system, issued the proclamation following a long conference with officials of the Georgia Association last Saturday, and in commending its text and its spirit to the people of Georgia H. G. Hastings, president of the State-wide development organization, issued a statement, in which he said, in part:

"This is not a movement of any one interest or organization more than any other. We must get every possible shoulder to the wheel. Georgians, whatever their political faith or economic bias, can all co-operate in a plan which is for the permanent as well as the immediate welfare of the State and everyone in it, town man, city man, farmer, merchant or laborer. There is no man who is not affected by present conditions on our farms, and there is no man who should feel that this movement does not include him."

The unusual proclamation from Georgia's capitol follows in full:

"Whereas, agriculture is Georgia's basic industry and the economic condition of Georgia farmers at the present moment presents a problem of vital concern to every Georgian, owing to inadequate farm profits and consequent farm abandonment and unsatisfactory social, educational and business conditions resulting therefrom; and,

"Whereas, it is a matter of definite knowledge that farmers in Georgia who have followed a program of diversification based upon livestock—a program generally known as the cow-hog-hen farm program—are enjoying a satisfactory condition of prosperity; and,

"Whereas, the organized forces of the State College of Agriculture and the State Department of Agriculture, similar forces of the railroads and other agencies, with the active backing of the Georgia Association, a non-profit, State-wide development and advertising organization working unselfishly for the development of the entire State, have brought assistance to farmers along these lines that has resulted during the past five years in the addition of nearly \$100,000,000 annually to the State's wealth; and,

"Whereas, the Georgia Association proposes to invite all of the business and civic forces of Georgia to concentrate their efforts for one week in the promotion of this program through the application of needed moral and credit support in backing up said agricultural forces of the State College of Agriculture and other agencies mentioned, I, Clifford Walker, Governor of the State of Georgia, do hereby designate and proclaim the week beginning March 7, 1927, as

'Cow-Hog-Hen Week,' and earnestly solicit in behalf of the Georgia Association the official aid of mayors and officials of Georgia municipalities and counties and all other civic and commercial organizations, and especially all the newspapers, in the State of Georgia.

"(Signed) CLIFFORD WALKER, Governor."

Following this Executive action, the Georgia Association has put in motion in every county and important town, almost in every hamlet in Georgia, machinery through the operation of which meetings will be held within the reach of every urban business man and every farmer in Georgia during "Cow-Hog-Hen Week," where progressive business men and women, industrial developers and agricultural authorities and trained rural improvement enthusiasts from near and far will carry the message of enlightened farming and expound the doctrine of farm-life improvement. Also every clergyman in Georgia, whatever may be his denominational faith, has been appealed to during "Cow-Hog-Hen Week" to preach at least one sermon in which shall be stressed the absolute necessity, purely from the spiritual and social standpoint if for no other consideration, of discarding cotton as the sole crop dependent in Georgia agriculture and of substituting for the erstwhile "king" crop a diversification program predicated upon the cow, hog and hen plan, which has proven so successful in the agricultural States of the North and West and in every Georgia community in which it has consistently been practiced.

Last Monday night, still further giving impetus to this movement, the city council of Atlanta unanimously passed the following significant resolution, which was introduced jointly by Aldermen Claude Ashley, W. Guy Dobbs and J. Allen Couch and Councilman Frank Callaway:

"Since agriculture is the basic industry of the people of Georgia, furnishing the direct means of livelihood of 74.9 per cent of its people, it follows that any condition inimical to the agricultural interests of the State is harmful to all of the people of Georgia, no matter what their occupation or where they reside.

"Conditions at present on the farms of Georgia are unsatisfactory, presenting a problem which must be faced by the people of the State as a whole.

"It has been definitely demonstrated in various counties of the State, and notably in Turner and Tift counties, that diversified agriculture on what is known as the 'Cow-Hog-Hen Plan' of the Georgia Association has brought prosperity wherever it has been put into effect, supplying a sharp contrast with conditions on farms where the system inherited from an older day of all-cotton farming has been followed.

"The Georgia Association has a well-defined plan for improving conditions, and in accomplishing this plan has the united support of the well-intentioned citizens of the State who have the best interests of all in view.

"The Georgia Association and its plan are commended to the citizenry of Atlanta, and the full support of all persons, of whatever occupation or interest, is urged in behalf of the Association."

In a formal and epitomized statement issued and broadcast this week on "The Whys of Cow-Hog-Hen Week" the advisory committee and executive officials of the Georgia Association set forth the following salient facts:

1. About \$75,000,000 new farm wealth annually already is resulting to Georgia from "Cow-Hog-Hen" farming, with less than 20 per cent of our farmers following the program.
2. Georgia landowners who have built fences, constructed buildings for dairy cows, hogs and poultry on their farms, furnished their tenants with livestock and poultry and have supervised these tenants, requiring them to follow sanely the

principles of the Cow-Hog-Hen program, are earning from 10 to 20 per cent on their investment, their tenants are free from debt, buying their supplies for cash and getting in shape to own their own farms.

3. Thousands of Georgia farmers, especially tenant farmers, convinced by the successes of their cow-hog-hen farm neighbors, are eager to buy dairy cows, brood sows and poultry and to grow the feed necessary for them. Many are unable to do this because: The local bank may be unable or unwilling to extend the initial credit needed; landowners may be unable to build fences, construct farm buildings, buy modern machinery, purchase livestock necessary to help themselves or their tenants to start, hence they can do nothing but get "cotton credit" and continue to gamble with fate; pressure of old debts or one of a dozen other things, and especially, in many cases, lack of efficient and intelligent community and county organization may be the chief bar to the start of the individual along a safe road, and failure to appreciate that there is in Georgia now a profitable market for dairy, hog and poultry products.

4. The remedy? First, in some counties local banks have made loans on dairy cows, poultry and hogs to tenants as well as farm owners. One banker says such loans have proved "self-liquidating." Not an instance has been reported to the Georgia Association where a bank has lost a penny on a dairy cow loan, and, second, in some counties chambers of commerce or civic organizations have financed the purchase of dairy cows, poultry and hogs (Athens Chamber of Commerce, nearly 100 heifer calves for boys' clubs; Fitzgerald Chamber of Commerce traded bales of cotton for purebred bull calves; Bainbridge Kiwanis Club financed carload purchases of dairy cows; many other similar example; special committees in rural counties have raised revolving funds and bought cattle and hogs for distribution).

5. There is a growing demand for good dairy cattle in Georgia (it would take 200,000 more milk cows to supply Georgia's home butter and cheese market). Railroad and college forces are ready to help select good cattle in other States. Two or three trainloads could be placed this spring to meet present demands if properly organized. Millions of dollars' worth of roughage was wasted in 1925 and 1926 from lack of dairy cattle.

6. The purpose of Cow-Hog-Hen Week is: To help communities to the best method of financing the purchase and handling dairy cows, hogs and poultry; to help work out plans whereby every county in Georgia at the earliest possible date may have the services of a county agent and home demonstration agent, without which cow-hog-hen farming cannot be successful, and to bring about a general understanding of fundamental methods by which the business forces of every community may give most effective help to their farmers, both in livestock farming and co-operative marketing.

In addition to Georgia agricultural development workers and enthusiasts—such, for example, as the president and professors of the State College of Agriculture, Statehouse officers, officials of the State Department of Agriculture, educational, social and religious leaders of the State and officials of the Georgia Association, and men and women prominent in various counties—who will participate in meetings to be held during the week, the following are among the prominent leaders in different lines of endeavor who have been invited to come from other parts of the country to deliver addresses and contribute to the success of the enterprise:

Richard H. Edmonds, editor of the MANUFACTURERS RECORD, Baltimore; S. Davies Warfield, president of the Seaboard Air Line Railroad, Baltimore; Clement S. Ucker, director of development, Seaboard Air Line Railroad; J. M. Mallory, industrial agent, Central of Georgia Railroad; Hon. W. M. Jardine, secretary, United States Department of Agriculture; L. A. Downs, Chicago, president of the Illinois Central Railroad; Fairfax Harrison, Washington, D. C., president of the Southern Railway; George Gordon Crawford, Birmingham, former Georgian and first graduate of the Georgia School of Technology and president of the Tennessee Coal, Iron and Railroad Company; Chester W. Ambler and E. H. Taylor, editorial staff of the Country Gentleman; W. E. Skinner, former manager of the National Dairy Association; editors of national livestock publications and managers of national purebred livestock associations.

Gold-Mining Operations Planned for Georgia Hills.

According to an article published in the Atlanta Constitution recently, mining operations are under way in one of the abandoned gold mines of Lumpkin county, Georgia. The article states, in part:

"Developments in the Dahlonega gold field within recent months are significant, and follow:

"Efforts of the Dugas corporation of Atlanta to mill gold from the old Finley ridge mines near success.

"Capt. S. F. Evans, owner of the Barlow and Hand mines, in conference with New York capitalists, rumored to be Guggenheims, relative to re-establishing mill operations.

"Gold-mining interests of the famous Canadian 'Porcupine belt' acquired mining rights on all available land.

"English mining interests looking toward operations in the Dahlonega field through the recent visit to the section of D. W. Thomson, noted mining engineer.

"Briefly, the story of the Dahlonega gold field since the days of the free gold mining by placer methods is one of overlooked opportunity or passive sleep over dormant, hidden wealth. Perhaps the biggest reason for the neglect of the gold fields of Lumpkin county in the past was the lack of adequate mining facilities to cope with the ground-water level and the heretofore prohibitive cost of freeing gold from the sulphides.

"With modern milling the average cost of extracting gold from the ore, through the complete process of mining the ore, grinding and the chemical treatment to remove the sulphide, is \$4 the ton, while tests of the Dugas corporation have revealed the presence in the Finley chute on famous landlot No. 1048, of five enormous veins of undeveloped ore, the lowest yield being \$8.26 a ton and the highest \$22.73. By larger quantity production, the cost of milling is even further reduced. * * *

"Two projects are going ahead night and day on the Dugas property. The first is a cross-cut of all valuable veins by means of tunnels through the mountains near the water level, thereby ascertaining the exact depth of the vein and its thickness and breadth, checking and assaying carefully as progress is made. With the blocking out of ore bodies and the ascertaining of the exact values, a gold mill in keeping with the tonnage warranted by the ore will be erected by the base of the mountain.

"This plant will be a modern ore-crushing and cyanide plant, and extraction of the precious metal being made possible by dissolving the metal chemically to free the gold from the sulphide. It is impossible to use the amalgamation method by quicksilver with the main part of the ore, due to the presence of the sulphide.

"Colonel Dugas is well known among engineers through his development of the famous water-grinding process for mica, and is the founder of one of the largest mica-grinding institutions in the world, located at East Point, and known as the Mica Products Company."

\$2,500,000 Program of Improvement for the University of Tennessee.

Knoxville, Tenn.—A \$2,500,000 improvement program for the University of Tennessee has been assured by the passage of necessary appropriation measures by the House of Representatives at Nashville, following similar action by the Senate. It is planned to disburse \$500,000 each year for five years. Construction will probably be started soon on a memorial dormitory for men on the Chamberlain property at a cost of approximately \$150,000.

Second Unit Installed in Oklahoma Power Plant.

[Special Correspondence Manufacturers Record.]

Oklahoma City, Okla., February 25.

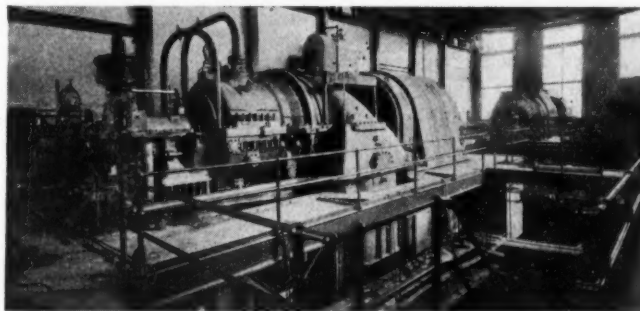
The installation of unit No. 2 of the Horseshoe Lake electric generating station of the Oklahoma Gas and Electric Company was recently completed. Work started on the installation of this unit May 2, 1926. The total capacity of the plant is now about 47,000 horsepower. Improvements included a new turbo-generator, a 1000 horsepower boiler, a smokestack and three 8033 kilowatt transformers, plus auxiliary equipment.

Additional building space was not necessary; when the plant was first built the superstructure, underground tunnel and switchboard were made large enough to accommodate the unit just completed. The plant is located about 23 miles east of Oklahoma City between two ends of a horseshoe-shaped lake. A large tunnel, through which an average size motorcar may be driven with comparative ease, connects the two ends of the lake, running underneath the plant. The water thus obtained is used for cooling and condensing purposes at the rate of 30,000 gallons an hour. It was necessary for the company to buy nearly 1000 acres of land to own and control this lake.

The original plant was placed in use in August, 1924, when four boilers similar to the one just installed were used. Because of the introduction of new features in design, the use

of forced draft, powdered fuel and other improvements, it was only necessary to install one additional boiler to supply the two units.

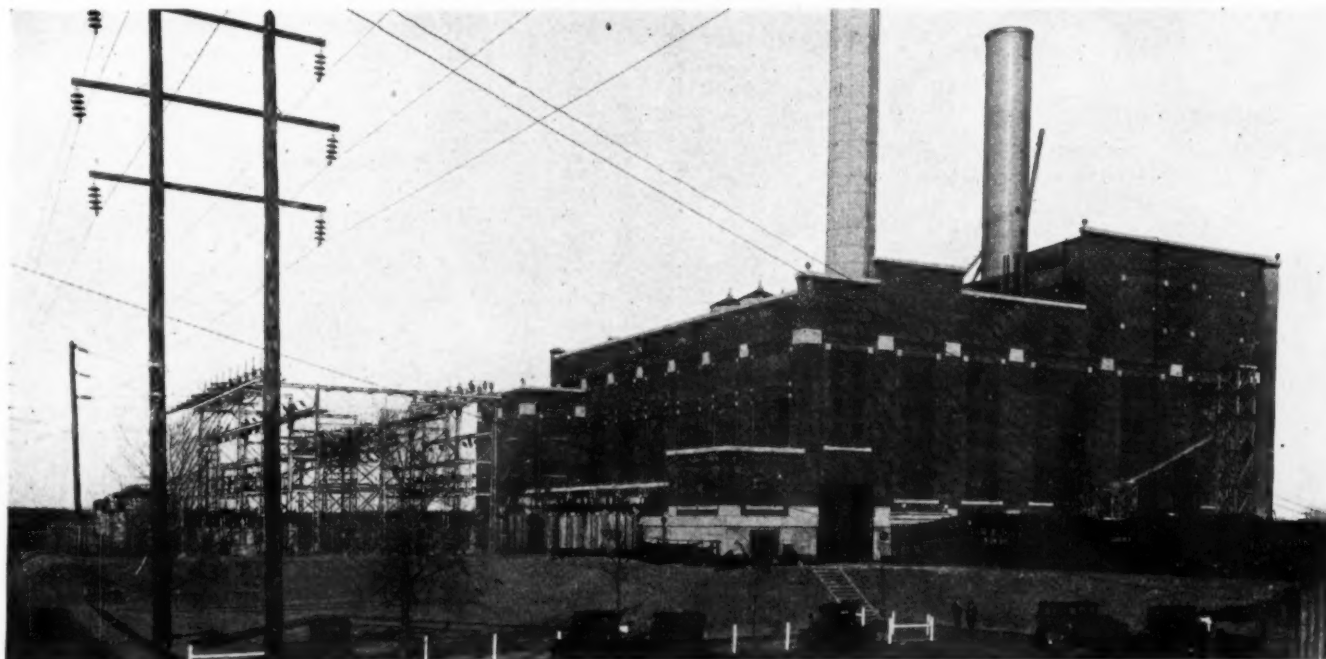
At present two 63,000-volt lines run to Oklahoma City and



NEW 20,000 KILOWATT UNIT IN FOREGROUND.

to the plant. A line of 13,000 volts runs to Chandler, Okla. Another 63,000-volt line runs to Shawnee.

The Byllesby Engineering and Management Corporation, Chicago, Ill., designed and built the station. Construction work was directed by F. S. Partridge.



HORSESHOE LAKE STATION OF OKLAHOMA GAS AND ELECTRIC COMPANY; CAPACITY 47,000 HORSEPOWER.

\$3,000,000 Hotel for New Orleans.

New Orleans, La.—Plans have been announced for a \$3,000,000 hotel to be erected at Canal and Franklin streets, this city, by B. G. Carbajal, Inc., owner of the property. The site has a frontage of 53 feet, with a depth of 127 feet, and it is understood the proposed hotel will be 15 stories high, to contain a total of 300 rooms. It will be operated under lease by Robert L. Cherry, manager of the William Penn Hotel, Houston, who will give special attention, it is said, to kitchen and dining room service. Work of clearing the site is expected to begin about August 1. Emile Well, Inc., of New Orleans is the architect.

Bids on \$2,000,000 of Washington Work.

Washington, D. C.—Bids have been invited by the Board of District Commissioners for street and alley work here to cost approximately \$2,000,000 and to comprise about 90 per cent of the projects for the next fiscal year and the remainder of those for the current year. Proposals will be opened March 14 for resurfacing 100,000 square yards of streets and for widening projects; on March 15 for 100,000 cubic feet of resurfacing work by the heater method; on March 16 for two groups of concrete roadway construction, each group to contain 100,000 square yards, and on March 17 for 60,000 square yards of alley paving and 30,000 square yards of sidewalk construction.

Rapid Construction Progress on \$52,000,000 Hydro-Electric Project at Conowingo, Md.

4000 MEN NOW AT WORK BUILDING DAM, POWER HOUSE, HIGHWAY BRIDGE AND RELOCATING RAILROAD LINES—FIRST UNIT TO BE OPERATING ABOUT JUNE, 1928—INITIAL INSTALLATION 378,000 HORSEPOWER, ULTIMATE 594,000.

By WM. C. L. EGLIN, Vice-President and Chief Engineer, Philadelphia Electric Company, Philadelphia, Pa.

Work is being vigorously pushed by a force of 4000 men on the \$52,000,000 hydro-electric development at Conowingo, Md., under construction through several subsidiary companies for the Philadelphia Electric Company, by whom it will be controlled in operation and in whose system its entire output will be utilized. Its principal features are the Conowingo dam and power house, about two miles south of the present Conowingo bridge over the Susquehanna River, with an initial wheel capacity of 378,000 horsepower—ultimate capacity 594,000 horsepower—a step-up sub-station and a 220,000-volt transmission line to Philadelphia. In addition, it has been necessary to relocate about 15 miles of the Columbia and Port Deposit branch of the Pennsylvania Railroad, about

of a number of possible sites in the vicinity and of various dam types and headwater levels. The location finally selected, with a normal and maximum pool elevation of 108.5 feet above sea level, proved most desirable from all standpoints, including that of maximum permissible grade on the Columbia and Port Deposit Railroad as relocated. A reservoir having an area of approximately 14 square miles will be formed at the dam when it is completed.

The east side of the Susquehanna at this point is advantageous for construction work, due to the favorable character of the river banks for camp and construction plant layout and to the presence of the Columbia and Port Deposit Railroad, providing ample facilities for the transportation of



EXCAVATION TO ELEVATION MINUS 30 FOR DRAFT TUBES. HEAD WORKS FOR UNITS NOS. 1 AND 2 IN FOREGROUND; FOR 9, 10 AND 11 IN THE DISTANCE.

seven miles of the Philadelphia-Baltimore pike and a considerable mileage of less important roads.

Contract for the design and construction of the dam and power house has been awarded to Stone & Webster, Inc., who have sub-contracted the construction of the greater portion of the dam to the Arundel Corporation of Baltimore. The Arundel Corporation has been awarded, also, the contract for relocation of the tracks of the Columbia and Port Deposit branch of the Pennsylvania Railroad. Contract for the design and construction of the transmission lines and of the sub-station located on the roof of the power house has been awarded to Day & Zimmermann, Inc.

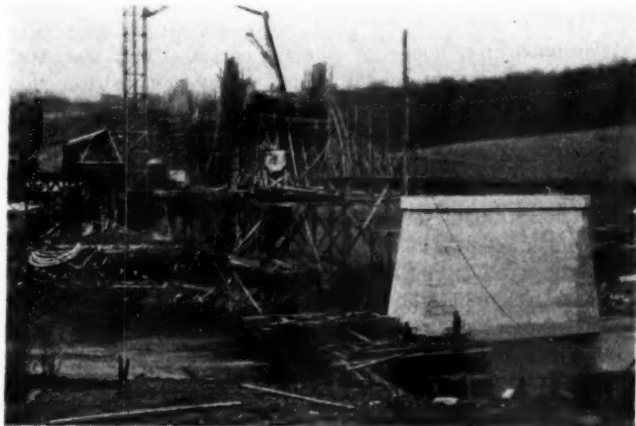
An exhaustive study was made of the relative advantages

materials and men. On the west bank, however, where the power house is being placed, space is limited for construction plant; also, at the start of the project, no adequate transportation facilities existed and it was necessary to construct approximately 10 miles of railroad to connect with the Pennsylvania Railroad system at Havre de Grace. The tow-path of the old Tidewater Canal afforded an excellent road-bed, requiring very little grading, and within three months of the start of construction work this railroad was in operation.

The west abutment of the dam is in a projecting hill or rock, into which the retaining wall section, extending 145 feet from the power house to the abutment, will be built

to form an adequate seal for the impounded waters. The head works for the power house, providing for 11 main units and two station service units, then extend 900 feet to the beginning of the spillway section, which is 2385 feet long. From the east end of the spillway the retaining-wall section continues 1200 feet to the east abutment, which also serves as the abutment for the highway bridge over the relocated tracks of the Columbia and Port Deposit Railroad.

The dam is solid masonry construction of gravity type,



BRIDGE ACROSS OCTORARO CREEK, RAILROAD LOCATION.

founded on rock at an average elevation 15 feet above sea level. Width at bottom of retaining wall section is 67 feet and at spillway section 85 feet. The spillway section, designed to pass floods up to 880,000 cubic feet per second, will have a fixed crest at elevation plus 86, on which will be mounted, for the purpose of regulating the level of the storage reservoir, 50 movable crest gates. These gates will be constructed of structural steel and will be equipped with two roller trains on each gate and with sealing provisions along the vertical edges and bottom. They will be 22½ feet high by 40 feet long and will weigh about forty-two tons each. There will also be three regulating gates, 10 feet by 40 feet, of similar construction, located adjacent to the power house. Operation of the gates will be effected by means of three electrically operated traveling gantry cranes, runway for which has been provided on the top of the dam and power house. These cranes have been designed for 60 tons capacity each. A gasoline-engine-driven generator will be installed on one crane for emergency use.

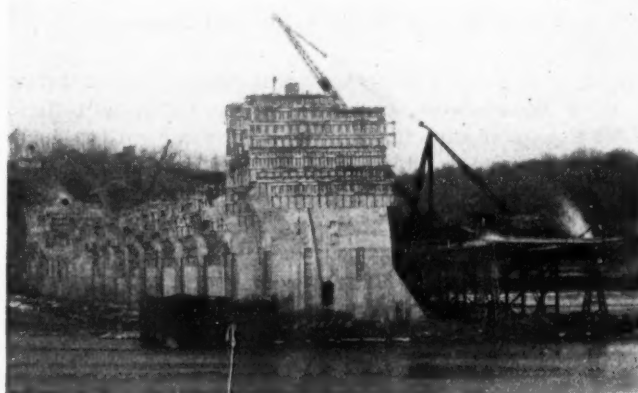
A highway bridge with a 20-foot roadway, at elevation plus 114 and parapet walls five feet high on each side, will be constructed on the dam to replace the present Conowingo bridge. Piers seven feet thick on 45-foot centers will rise from the spillway to support both the crest gates and the highway bridge. One of the accompanying illustrations shows a completed spillway section with the piers at either side and the steel girders in place for supporting the highway bridge and the gate crane bridge. The slots in the piers to contain the crest gate guides may be seen from this view.

The power house, as noted above, is located adjacent to the west shore. The head works provide intakes for 11 main units and two station-service units. By locating the top of the intake openings 40 feet below the pool level protection from floating ice has been secured without the expense of constructing the usual rock fill and skimmer arch to protect the forebay. Structural-steel trash racks, in sections 14½ feet by 24 feet, will be provided for all units, including the station service units. Sectional headgates, 14½ feet by 25 feet, complete with bronze sealing strips, will be provided in back of the trash racks for use in case it is desired to unwater the intake passages. The sectional headgates and

trash racks will be handled by the gantry traveler on the dam. The deepest excavation for the power house will be to elevation minus 20, over 30 feet below the original river bed level, required for the construction of the draft tubes for the Allis-Chalmers water-wheels. The superstructure of the power house will be concrete, with a structural steel frame. The high-tension switching station will be located on the roof.

Seven main water-wheel units will be installed at this time, four of these to be supplied by the Allis-Chalmers Manufacturing Company and three by the Wm. Cramp and Sons Ship and Engine Building Company. Each unit will be designed to have a capacity of 54,000 horsepower at full gate at 89 feet normal net head and 81.8 revolutions per minute, and will have a capacity of 50,000 horsepower at the point of best efficiency. They will be of the vertical-shaft, single-runner, Francis-reaction type, and will be the largest units, in physical dimensions, built to date. The runners will be of cast steel, cast in not more than four parts. Each unit will have a structural-steel pit liner or generator support capable of carrying the weight of a 40,000-kva. generator.

Two station service water-wheel units, supplied by the S. Morgan Smith Company, will be provided. These will be 1900 horsepower each, operating at 89 feet normal net head and 360 revolutions per minute. The runners will be single Francis-reaction type, equipped with vertical shafts, plate-steel scroll cases, governors, oil-pressure systems and appurtenances. With each main water-wheel unit a 27-foot-diameter vertical shaft butterfly valve, capable of operating under an 84.5-foot head on the center line of the valve, is to be installed in the water passages to the runners. These valves will be operated by oil pressure from a central oil-pressure system. Two six-foot-diameter butterfly valves will be provided for the station service units. The butterfly valves



COMPLETED SPILLWAY SECTIONS, COFFERDAM AND CONSTRUCTION BRIDGE ON EAST SIDE.

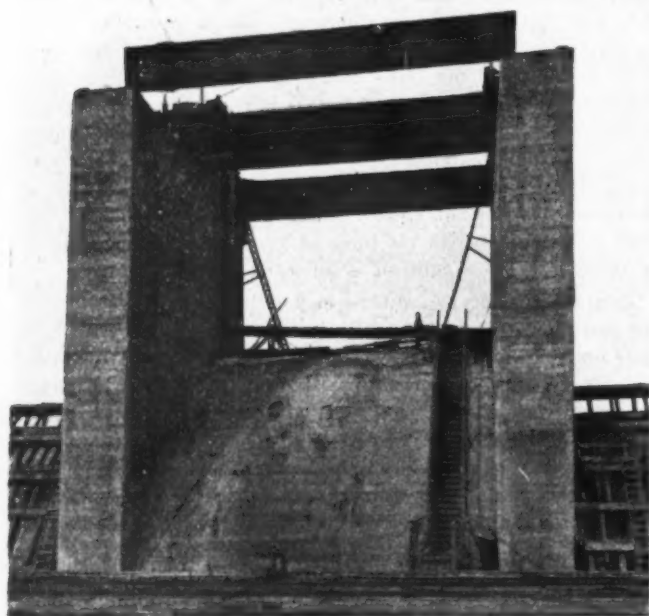
will be furnished by the same manufacturers as the respective water-wheel units.

Seven main generators and two station service generators will be installed; four main generators to be provided by the General Electric Company and three main generators and the station service generators by the Westinghouse Electric and Manufacturing Company. Each main generator will have a capacity of 40,000 kva., generating at 13,800 volts, three-phase, 60-cycle and 81.8 revolutions per minute, will be direct connected to a main water-wheel unit, and will be provided with direct-connected 715 kva. auxiliary A. C. generator and a small direct-connected exciter for the auxiliary generator. A separate motor generator set will supply the excitation current for the main generator. The weight of the rotating elements, together with the hydraulic thrust, will be carried by thrust bearings on top of the generators.

In the generators provided by the General Electric Com-

pany a spring-type thrust bearing will be used, while the Westinghouse generators will have Kingsbury thrust bearings. The guaranteed efficiency of these main generators will be in excess of 97 per cent at rated capacity.

Each station-service generator will have a capacity of 1600 kva., generating at 400 volts, three-phase, 60 cycles and 300 revolutions per minute, will be direct-connected to one of the station service water-wheel units, and will be provided



COMPLETED SECTION OF SPILLWAY WITH TWO PIERS.

with a direct-connected D. C. exciter and Kingsbury thrust bearing.

Stationary power transformers will consist of four banks of three transformers, each having the following rating: 26,067 kva. rated capacity, 29,333 kva. overload rating, single phase, water-cooled, 13,800 low-tension voltage and 127,000-220,000 volts Y at the high-voltage terminals. The guaranteed efficiency at rated capacity is in excess of 99 per cent.

Two power-station cranes will be installed in the generator room. They will be of the four-motor electric-traveling type, each equipped with a 150-ton main hoist and a 25-ton auxiliary hoist. Both the main and the auxiliary hoists will be installed on a single trolley. Two 50-ton transformer traveling cranes will be installed for separate or combined operation. One 15-ton machine-shop traveling crane of the three-motor type, equipped for control from the floor, will be installed.

On the west side the rock excavation required for the power house and tail race will be approximately 300,000 cubic yards, of which a considerable portion found suitable for mixing in concrete has been crushed and used in construction.

A construction progress schedule has been carefully worked out, which contemplates the completion of the initial project in three low-water seasons. High water frequently occurs in January from melted snow. Floods, accompanied by ice gorges, usually occur in March and result in a high water level. Heavy rainfalls during the spring and early summer frequently cause floods as late as June. Construction camps have been established on each side of the river, that of the Arundel Corporation, who are constructing the greater part of the dam, being on the east side and that of Stone & Webster on the west side.

On the west side a complete camp with all necessary mess

halls, store, hospitals and other facilities for accommodating approximately 1500 men has been constructed. The construction plant consists of a rock-crushing plant, sand and stone storage, concrete-mixing plant, repair and supply shops, carpenter shop, etc. Rock is handled from the excavation by means of steam shovels, standard-gauge locomotives and dump cars. In placing concrete for the power house six towers approximately 250 feet high are being used, with 16-inch chutes.

In the low-water season of 1926 a cofferdam was built enclosing the power house and west branch of the tail-race, designed for floods of nearly 400,000 cubic feet per second, so that work on the heavy excavation within the enclosed area could be continued through the spring floods of 1927. Also, a cofferdam was constructed from the east bank of the river out to within approximately 700 feet of the power-house cofferdam; in this cofferdam the entire dam foundation was poured up to elevation 20, alternate sections being continued to full height. The latter cofferdam was built with stop logs and rock-filled cribs alternating, with the purpose of removing the stop logs as soon as the alternate spillway sections should be poured to elevation 30 or higher to allow additional passages for the spring floods. This temporary construction has already received a severe test. In November a flood of a maximum flow of 345,000 cubic feet per second occurred. No material damage resulted to the west-side cofferdam. The east-side cofferdam was submerged, but was practically ready to be abandoned.

During the low-water season of 1927 the cofferdam from the east bank will be continued over to the power house, the river flow being taken care of through the stop-log openings in the 1926 cofferdam and the alternate sections of spillway at elevation 20. As soon as the dam foundation can be poured in this cofferdam, with alternate sections to elevation 30, the stop logs in this cofferdam will likewise be removed. As the piers for the highway bridge will be included in the alternate sections of spillway, which are to be carried up to full height, these sections must be pushed to completion so that the highway bridge on the dam can be opened to traffic and thus permit the removal of the existing highway bridge at Conowingo.

By the close of the low-water season of 1927 the head works and substructure of the power house should be completed to a height sufficient to enable the construction work to proceed during the spring floods of 1928. The relocation of the Columbia and Port Deposit Railroad must also be completed and in operation by this date.

Construction work was started on March 8, 1926, and excellent progress has been made on both sides of the river.

The construction of the power house will require approximately 250,000 cubic yards of concrete, and approximately 60,000 cubic yards have already been poured. Of the 400,000 cubic yards of concrete required for the dam, over 200,000 cubic yards have already been poured.

On the east side, for the construction of the dam, a steel construction bridge, with deck at elevation 60, has been built on the toe of the apron. On this bridge are three self-propelled, electrically operated gantry travelers, each equipped with a 15-ton derrick and a concrete hoist tower. There are also three standard-gauge railroad tracks on the bridge and the gantry cranes are so constructed that cars on all three tracks can pass under them. The concrete mixing plant on this side of the river is so designed that the concrete is discharged from the mixers directly into cars at the bridge elevation.

A total force of over 3000 men is now engaged on the dam and power house. The first unit is scheduled to be ready for operation about the middle of 1928, and it is expected that

several additional units will be ready to help carry the peak load in Philadelphia that year. In the average year it is expected that the seven units of the initial installation will generate 1,380,000,000 kilowatt-hours.

The relocation of the Columbia and Port Deposit branch was commenced on May 25, 1926, and is progressing satisfactorily. In addition to the usual excavation and filling to be expected on such work, this job involves three rock tunnels, ranging in length up to 400 feet, one 5-arch and one 6-arch concrete bridge, with numerous small bridges and culverts. The tunnel near Williams Point has recently been completed. About one thousand men are employed at present in the work of relocation on the bridge across Octoraro Creek.

On the west side the highway approach to the bridge over the dam is completed, and on the east side very little remains to be done.

Y. M. C. A. Building for Hopkins University Campus.

A decision has been reached by the board of directors of the Young Men's Christian Association and the board of trustees of Johns Hopkins University, Baltimore, for the erection of a Y. M. C. A. building on the Hopkins campus. The two boards were represented by committees composed of Francis A. White, Henry E. Treide, John R. Cary, James M. Motley and Carlton Harrison for the Association, and Dr. J. Frank Goodnow, Dr. Joseph S. Ames, Judge Eli Frank and Dr. Hall Pleasants for the University.

It is recommended by the committees that the University furnish a site for the building, with certain funds, including the value of Levering Hall, destroyed by fire several years ago. The Association will undertake to raise additional funds necessary to complete the proposed building, both the site and building plans to be approved by the advisory board of architects of the University.

The structure will probably be two stories and basement, to house a cafeteria and private lunch rooms in the latter. It will be erected around a commodious hall, to be equipped with fireplaces and other inviting features. The first floor will contain a reading room and administrative offices; the second floor will probably contain a banquet hall and several smaller rooms or offices. Executive offices of various student activities on the campus may also be housed in the building, although this has not yet been determined.

The new building will be named Levering Hall, in honor of Eugene Levering of Baltimore, a member of the board of trustees of the University, donor of the former Levering Hall and large contributor to the present project. While the cost of the structure has not been determined, it is thought that \$100,000 will be required, in addition to funds already in hand. Dr. John H. Latane is chairman of the board of management of the Hopkins Y. M. C. A. and Mr. Harrison is general secretary of the Young Men's Christian Association.

Newport News Firm Low Bidder at \$1,947,000 to Refit Ship.

Newport News, Va.—In competition with three other firms, the Newport News Shipbuilding and Dry Dock Company has submitted the lowest bid, at \$1,947,000 and completion of work in 300 days, for refitting the liner America, damaged by fire about a year ago when in the German-American service for the United States Lines. An alternate bid was submitted by the company at \$1,894,000 and completion of the work in 360 days. Improvements to the ship will consist of entirely refitting the interior.

American Rolling Mill Company Acquires Additional Properties at Ashland, Ky.

Ashland, Ky., February 28—[Special.]—The American Rolling Mill Company, Middletown, Ohio, has materially added to its holdings by acquiring approximately 90 per cent of the stock of the Norton Iron Works and one-third interest in the Ashland Steel Company, both of Ashland, the purchase including the holdings of the late T. N. Adams.

The Norton Iron Works, an old concern, adds to Armco's holdings one blast furnace of 350 tons capacity, wire mill, nail mill, wire-cloth factory and a foundry. The Ashland Steel Company has a small blooming mill and a rod mill. The big furnace at Norton will be started shortly and after this details will be worked out for the operation of the different divisions of the Norton Iron Works and later for the Ashland Steel Company.

At the reorganization meeting the following directors were elected: C. W. Verity, C. R. Hook, R. C. Phillips, W. W. Sebold, J. H. Frantz, J. C. Miller, S. R. Rectanus. Officials are J. H. Frantz, president; J. C. Miller, vice-president; R. C. Phillips, secretary; C. W. Verity, treasurer; G. W. McNeilly, assistant secretary and assistant treasurer.

January Earnings of Florida Power and Light Company Set New High Record.

Florida Power and Light Company, which supplies electric power and light service in 90 communities in Florida, reports for January the largest gross and net earnings in its history. The highest previous record of gross earnings was attained last April with a figure of \$1,288,976. For January this year, however, gross earnings were \$1,354,601. This is an increase of 12 per cent over January, 1926. Net earnings are 11 per cent higher than those for January, 1926.

The gross earnings for the twelve months ended January 31, 1927, were \$13,250,039, the highest for any twelve months' period in the company's history and 36 per cent larger than for the twelve months ended January 31, 1926. Net earnings for the twelve months ended January 31, 1927, were \$4,936,858, also the largest amount for any twelve months in the company's history and 23 per cent larger than for the twelve months ended January 31, 1926.

Florida Power and Light Company is a subsidiary of American Power and Light Company and is operated under the supervision of Electric Bond and Share Company.

Considering \$750,000 Seawall Road Protection Project.

Pascagoula Miss.—Formal organization of the Jackson County Road Protection Commission, recently appointed by Governor Henry L. Whitfield, has been effected by the election of F. H. Lewis, Pascagoula, president, and Fred Taylor, clerk. Other members of the Commission include E. H. Mayo, Moss Point; F. G. Snell, Big Point; Jerry Oliver, Gautier, and A. M. Graham, Vancleave.

The Commission, which has before it the seawall road protection project along the beach and bay front, about 2.5 miles at Pascagoula and 2 miles at Ocean Springs, with concrete road and sidewalk, has decided to invite engineers interested in this class of work to file with the Commission by March 21 plans and specifications of such protecting wall, sidewalk and roadway as in their judgment may be best suited for this particular locality, together with an estimate of the cost of construction, cost of plans, specifications and engineering fees. It will meet March 24 to examine plans and discuss details of the project.

The project is estimated to cost \$750,000.

A 10,000 Acre Dairy Farm in Florida.

WITH A CORNFIELD OF 2200 ACRES—OTHER FACTS AND INSTANCES SHOWING WHY DAIRYING IS COMING TO THE FRONT IN THE STATE.

By G. M. RANDALL, M. D., Daytona Beach.

From perusal of current literature, industrial and financial periodicals and general newspapers throughout the United States, one must be convinced that there is a strong trend toward agriculture in its various phases and specialties such as has never been observed before in our history. That agriculture is the basic industry upon which all other activities depend for success, and upon which the very existence and perpetuity of the race depends, is conceded by intelligent people.

Without doubt there is a stronger trend in this direction in the Southern States, where the growing season is longer, and there is less lost motion from winter hibernation than there is in the Northern States. Another factor which is operative in the South is this: There are many large ranches and plantations and rural estates which have been devoted to cotton. The cotton plantation is no longer popular or attractive, owing to fluctuating and low prices of the staple, added to which is the damaging effect of the boll weevil. Many of these plantations have been operated by absentee owners, who have pursued the ancestral and traditional vocation, with colored help almost exclusively. Diversity in agriculture, which is an important factor of safety, has been deplorably absent.

A considerable increase in the population of the South is from Northern and Western States, where greater diversity in farming is practiced on smaller acreages and in a more intensive way. As an example of changing agricultural practice, Tennessee is rapidly coming to be the most important poultry State in the Union. This industry appeals to the farmer who is obliged to start modestly and who desires to make a competence surely, quickly and pleasantly. To the man a bit more ambitious and with more financial resources to begin with, dairying makes a strong appeal. At present Wisconsin is the most important dairy State in the Union. There are 110,000 dairy silos in Wisconsin, where there are 54 silos for every 100 farms. The farm buildings in Wisconsin are probably the best and most expensive in the United States. This is necessary because of climatic

conditions. Cows and calves must be kept comfortable if good results are to be obtained.

Silos in Wisconsin are a necessity for good winter production of milk. The silos of that State store 9,000,000 tons of ensilage annually. The average cost of filling a silo is \$2.06 a ton. This phase of dairying in Wisconsin requires much machinery and equipment, such as ensilage cutter, corn binder, elevators, wagons, etc. The average silo holds 150 tons. We mention these facts relating to Northern dairying to show the relative difference in Southern practice. Silos are used to some extent in Florida, but relatively less than in any other State. Pasture is the cheapest of all feeds. Luxuriant forage is available every day in the year in Florida, provided the dairyman has sufficient acreage.

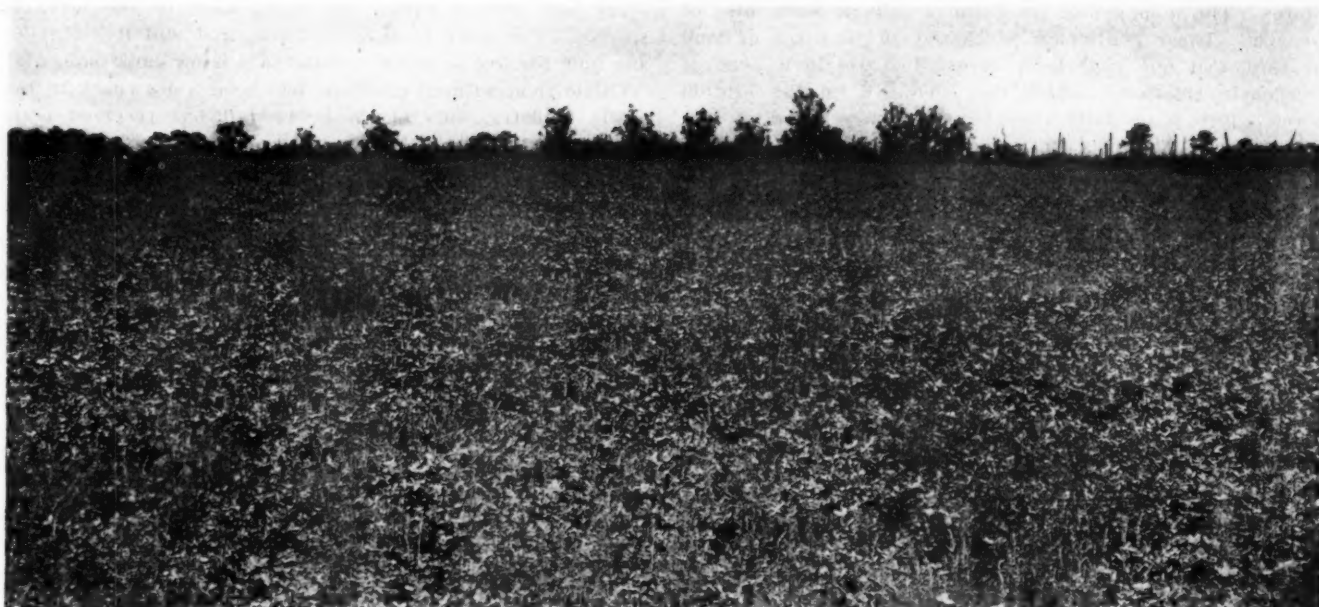
Meteorological conditions vary from year to year, even in semi-tropical Florida, though in the main the weather is fairly uniform. Some autumns and winters may have under the average of rainfall. The annual rainfall is about 56 inches. Lessened autumn and winter rainfall lessens the pasture feed, and such a condition makes a silo a very important adjunct. Even in the seasons when silos are not needed they pay the interest on the investment by the succulent feed in the winter months.

The alfalfa crop in Northern Florida is very successful, yielding from five to six tons to the acre. This does best in autumn, winter and spring. It should be preceded by burr clover. The soil does not require inoculation and requires no lime or fertilizer, except about 400 pounds of acid phosphate to the acre, which is broadcasted with the seed. It can be cut three times a year without injury to the plants. Sweet clover succeeds well, as do red, crimson and alsike. These legumes are used mostly for winter and spring pasture.

Kudzu, a very valuable hay and pasture crop, does better in Florida than in any other section of the United States. One acre will easily carry two head of stock from April to November, and, once planted, grows stronger each year without replanting or further attention. The average yield of Kudzu



VIEW OF THE 2200-ACRE FIELD OF CORN.



RED CLOVER IN MARCH.

hay is five tons to the acre. Kudzu hay has been demonstrated at the Florida-Georgia Farm to be the most profitable and the surest hay crop. It is a nitrogen-fixing crop, thus enriching the land while it is producing.

The State of Florida consumes over \$32,000,000 worth of dairy products annually, of which \$7,500,000 are produced in the State, thus leaving \$24,500,000 to be brought in from outside. From October 1 to April 15 of each year 12,500

or actually boiled. The net profit on a gallon of milk produced in Florida under modern conditions is clearly demonstrated to be double that of any State north of the Mason-Dixon line. The cost of producing milk at the Florida-Georgia Farms is 18 to 20 cents a gallon. Florida, however, is a new State, and the equilibrium between supply and demand has not yet been established, and cannot be for some years.

All facts and data relative to successful dairying in Flor-



SOME FINE STOCK ON THE FLORIDA-GEORGIA DAIRY FARM.

gallons of milk are shipped into Florida daily. Much of this comes in glass-lined tank cars, built on the vacuum plan, like a thermos bottle. The shipments come from Wisconsin, Illinois, Indiana, New York, and some even from Massachusetts. As much more milk comes into Florida every day in the year, winter and summer, from Virginia, Georgia, Alabama and Mississippi. This Southern milk is pasteurized,

and may easily be observed and obtained, as was the writer's experience on a visit to one of the largest dairy farms in the United States, located in Jefferson county, near Monticello. This is the Florida-Georgia Farm. It is owned by Charles B. Lewis, president of the Fourth National Bank of Macon, Ga., and A. J. Evans of Fort Valley, Ga., who is the most extensive grower and shipper of peaches in the United

States. The manager of the farm is J. Pope Bass, also of Georgia. These gentlemen purchased 10,000 acres of land in 1920, and one year later invested 25,000 in a herd of Wisconsin Holsteins, which they installed on the Florida acres. Two years later they bought a large herd of Lassater Jerseys in Texas and brought them down. The Lassater herd of Jerseys is the most celebrated in the South.

The Florida-Georgia Farm is tick-free; this is very easily

other host passes within the home zone of the larva it starves. The larva is quite enduring and will live without any host for five to seven months if it is on moist soil.

Cattle tick, without question, has been a drawback to the cattle industry, but this is because it has received little attention until the past few years. At present there are 18 counties in Florida that have suitable fence laws, and there are 8,148,728 acres of land that are absolutely tick-



ALFALFA FIELD IN FEBRUARY.

brought about by double fencing and having the range or pasture inside the double fence. Cultivated fields and crops occupy the area surrounding the pasture.

It is interesting to note that the cattle tick during the ground stage of its life, when it is a grub, will not travel over 10 feet. The female tick, after her engorgement, drops from the cow and proceeds to lay thousands of eggs. These eggs hatch, and in the larva stage they have very little power of locomotion, and if no cow, horse, mule, goat or

free. Systematic dipping in an additional 3,512,480 acres under State supervision will be completed within 10 months; 400 vats are now ready for this work. This will mean 37.2 per cent of the entire State tick-free in 1927. The tick problem is very easily handled, but if open-range cattle are allowed to roam unhindered they become a menace to profitable dairying and beef raising.

The United States Bureau of Animal Industry has arranged to give to Florida an expert in animal husbandry to



KUDZU, RUNNING FIVE TONS TO THE ACRE. CUT IN MAY, JULY AND SEPTEMBER.



A FIELD OF HAY VETCH ON THE BIG FARM.

co-operate with the State Sanitary Board on promoting improvement of dairy herds. This expert will aid in selection of animals to be brought into the State and give advice as to feeding and general care of imported stock. He will work in conjunction with Dr. J. V. Knapp, the State Veterinarian, at Tallahassee.

On December 10, when I visited the Florida-Georgia Farm, it was shipping daily 375 gallons of 4 per cent milk to St. Petersburg, for which it received 50 cents a gallon f. o. b. St. Petersburg.

The Florida-Georgia Farm has, without doubt, the largest field of corn in Florida; it consists of 2200 acres. The corn crop is very successful in this section, 50 to 75 bushels to the acre being the average. It is fed green and also used as silage, mixed with velvet beans and alfalfa. Between the

corn rows velvet beans are planted. After the corn is harvested the velvet beans are pastured. The best yields of corn in Florida have been on dairy farms with "stable fertilizer." Prize acres yield 100 to 115 bushels per acre.

The velvet bean is also used on the Florida-Georgia Farm as silage, ground with corn and peanuts. The silo is used as a factor of safety, or an emergency ration. It has actually never been needed, as ample pasture has always been available, but the Florida-Georgia Farm does not intend to get caught with short rations in any dry season. From February to June, 1926, 1200 acres of rye and oats were used as pasture. Five hundred acres of cowpeas, which cost less than \$6 an acre to seed and cultivate, provide abundant palatable leguminous hay and yield one and one-half to two tons to the acre. This crop leaves the land much richer in



A CLOSE-UP OF THE CORNFIELD, SHOWING VELVET BEANS ON THE STALKS OF CORN.

nitrogen. Five hundred acres of peanuts are also one of the crops planted. About 100 acres of peanuts are harvested for seed and the remaining 400 acres are pastured to hogs, of which the Florida-Georgia Farm has 1500. Duroc-Jersey and Hampshire are the favored breeds.

Northern cattle do not have to be "acclimated" in Florida any more than human beings do. In fact, bovines and humans here have many problems in common; not intricate technical problems, but just common-sense problems. Malaria and yellow fever were once a problem in the South, but now there is not one case of yellow fever under the Stars and Stripes, and malaria has disappeared with the advent of modern sanitation. The same principles apply to cattle. Bovine tuberculosis does not develop in Florida sunshine. Cattle tick starve to death in six months if fenced out.

The Florida-Georgia Farm supplies houses for both white

crop border around the pasture land varies from 60 to 100 feet. Mr. Elgie raises all of his feed, using one silo as emergency ration, or safety factor. The cattle are all highly bred, but not all registered. One of his bulls was grand champion at the Sesqui-Centennial. He also had two prize-winning cows with a record of better than 1000 pounds of butter production a year. One cow is now producing 109 to 114 pounds of milk daily.

Commissioner of Agriculture Nathan Mayo states that there has been a 10 per cent increase in dairying and poultry industry in Florida in the past 15 months ended October 1, 1926. He further states that dairying and poultry has made the strongest appeal to those who have written to his department for data and advice.

In conclusion, it may be said that the dairyman who contemplates locating in Florida has about all of his problems



KUDZU, FOR HAY, IN A PECAN ORCHARD.

and colored labor. On the farm are 120 mules and two tractors. There are employed 60 colored hands and 20 white men. They raise about 1500 head of hogs yearly and fatten several carloads of beef cattle yearly. They sell hay, corn and sweet potatoes and, until 1926, raised 1500 bales of cotton each year. Cotton is now abandoned on this farm.

Another up-to-the-minute Florida dairy adjoins the Florida-Georgia Farm. This is known as the Elgeria Dairy. The owner is W. J. Elgie from Sault Ste. Marie, Canada; he came to Florida in 1925 and bought 1250 acres, of which 1100 acres are in cultivation. Mr. Elgie brought his original herd of 115 Holstein cattle from Canada. He used no means to immunize against tick fever and has had no trouble. He has 22 miles of hog-tight fence, built double. The space between the two lines of fence is in crops. This

solved. One very important problem remains, and that is location. There is no county of the 64 in Florida which is not suited in some degree to dairying. North of the center of the State all-year pasture and forage is a simple problem, more so than farther south. The price of land is a factor in choice of location. Unfortunately, some perfectly good dairy land that should sell around \$150 an acre is now staked out in house lots, five to the acre, and \$1000 to \$2000 a lot. This is simply "No Man's Land." Perfectly good dairy land, and that in abundance, can be bought for \$50, \$75 and \$100 an acre, and within easy shipping distance to ample market. Volusia and Flagler counties occupy medium ground geographically. In these counties are probably 40,000 acres of available dairy land for sale at rational prices, this land perfectly drained and well located as to market. The

same is true also as to many other counties in the State.

The next step of progress in Florida must be agricultural development. The branches that have the call are dairying, poultry and garden truck, in just that order. The Florida Department of Agriculture is always glad to answer all inquiries, and it is not necessary to emphasize the accuracy and reliability of the information from this source.

Florida is pre-eminently an agricultural State, so far as industry is concerned. Agriculture is the keystone of the nation, and Florida is an important unit of the arch. Florida can easily feed itself and export ten times what the State consumes. This applies as much to dairy, poultry and truck as it does to citrus fruit. This fact should be understood by business men, bankers and farmers alike, not alone in Florida but throughout the length and breadth of the land.

Bids to Be Asked on \$1,500,000 Courthouse.

Milburn-Heister & Co. of Washington, D. C., and Durham, N. C., architects for the proposed Buncombe county courthouse and jail at Asheville, N. C., to be erected at a cost of \$1,500,000, including \$200,000 for furnishings and equipment, advise the MANUFACTURERS RECORD that plans will be ready March 4 and bids opened March 31. The structure will be fireproof, 130 by 130 feet, 16 stories, of steel construction. Proposals may be addressed to the Board of County Commissioners.

Baltimore's New \$1,000,000 Art Museum.

Work is in progress on drawings for the new \$1,000,000 art museum to be erected by the city of Baltimore on a six-acre site on the northern edge of Wyman Park; the site was presented by trustees of Johns Hopkins University. The structure will be 192 by 99 feet, of fireproof construction, with Indiana limestone exterior and interior of limestone and cast stone. Exhibition galleries will have plastered walls and ceilings, while the roof will be of terra cotta and composition, with skylights, and floors of marble and terrazzo. Heat will be obtained from the power plant of the university, distributed throughout the new building by means of an indirect system. Plans and specifications for the building are being prepared in the office of John Russell Pope of New York, while Henry Vincent Hubbard of Olmstead Bros., Brookline, Mass., is the landscape architect.

Blanchard Randall is chairman of the Municipal Art Commission, which is handling construction details.

Dwelling Projects for San Antonio.

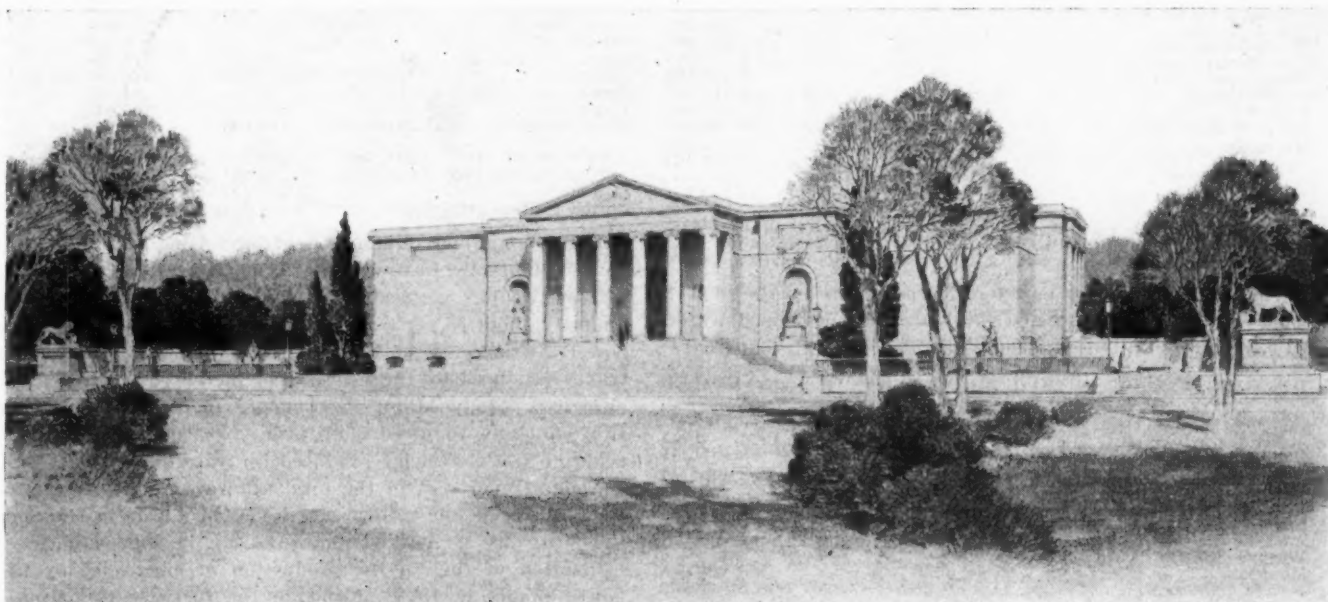
San Antonio, Texas.—Several projects for the erection of dwellings have recently been announced here, including one for the construction of a French village on Jones and East Magnolia avenues, for Frances Ostrom of this city. The first unit of this operation will embrace 30 villas to cost about \$250,000; the B. G. Miller Building Company has general contract and the Kerren-Tobias Lumber Company will furnish building materials, both of San Antonio.

Construction of 28 residences in Parkmoor Place has been completed by the L. E. Fite Company, which plans to erect 96 more in the same addition, work on the first 15 to begin at once. The total cost will be about \$350,000. A merger has been effected between Carvel & Co. of this city and the Del Mar Corporation of Corpus Christi, with plans of the latter to establish an office here for construction operations, including the erection of a number of high-class residences. The company will also establish an office in the Lower Rio Grande Valley at an early date and gradually expand its building program there and at San Antonio.

Colored Geologic Map of Oklahoma.

The first colored geologic map of the entire State of Oklahoma ever produced has recently been issued by the Geological Survey of the Department of the Interior. The map presents new data on more than half of the State. It is declared to be an important addition to the knowledge of the geology of the United States. The map is published on a scale of about 8 miles to 1 inch and measures 36 by 65 inches. Each of its numerous patterns indicates the area in which one or more rock formations appear at the surface.

Other colored State geologic maps that have been issued in recent years by the United States Geological Survey or by State organizations co-operating with the Federal Survey are those of Alabama, Arizona, Massachusetts, Rhode Island and Wyoming. A geologic map of New Mexico is now in press by the Geological Survey, and one of Texas is in course of preparation and will be issued by the Geological Survey in co-operation with the State of Texas. The Alabama and Arizona maps were issued by the Geological Survey of Alabama and the Arizona Bureau of Mines, respectively. The Massachusetts, Rhode Island and Wyoming maps were issued by the United States Geological Survey.



ART MUSEUM, TO BE ERECTED BY THE CITY OF BALTIMORE.

Water-Power Development Shows Steady Growth.

NEARLY ONE-HALF OF COUNTRY'S INCREASE LAST YEAR WAS IN THE SOUTH.

The total installed capacity of water-wheels in water-power plants of 100 horsepower or more in the United States on January 1, 1927, was 11,721,000 horsepower. This is an increase of 544,000 horsepower for the year, according to a recent report issued by the Department of the Interior's Geological Survey and the Federal Power Commission. The gain, though less than in 1923, 1924 and 1925, was greater than in any other preceding year except 1913. Since January 1, 1910, the increase in capacity is 7,800,000 horsepower, or an average of 460,000 horsepower per year.

The total capacity of prime movers—water-wheels, steam engines and turbines, and internal-combustion engines in public utilities, manufactures and mines and quarries (locomotives, motor vehicles and water craft not included)—is estimated from data published by the Bureau of the Census for 1923 and previous years as 56,500,000 horsepower, an increase of 26,000,000 horsepower since 1910. On January 1, 1910, water-wheels constituted 13.7 per cent of the total capacity of prime movers and on January 1, 1927, they constituted 20.7 per cent, showing a comparatively small but nevertheless increasing proportion of water-power development.

The proportion of the developed water-power requiring authorization by the Federal Government is 4,130,000 horsepower, or 34.5 per cent, of which slightly more than one-third is authorized under the Federal water-power Act. Licenses now issued under this Act provide for the development of 3,200,000 horsepower in the next 10 years. In addition to these developments, there will continue to be new developments and increased installations at present developments not requiring Federal authorization. Steady growth in water-power development seems assured for many years.

California, which became the leading State in developed water-power during 1925, was more firmly entrenched in first place on January 1, 1927, leading New York State, her closest competitor, by about 160,000 horsepower. The State of Washington, which has held third place since 1921, was displaced by Alabama, and South Carolina displaced North Carolina in fifth place.

DEVELOPED WATER-POWER BY SECTIONS.
(Plants of 100 Horsepower or More.)

Geographic division	1926		1927	
	Number plants	Capacity horsepower	Number plants	Capacity horsepower
New England	1,217	1,485,218	1,221	1,535,468
Middle Atlantic	618	1,995,289	613	2,055,853
East North Central	342	978,561	369	1,009,915
West North Central	194	524,562	201	532,894
South Atlantic	341	1,697,074	341	1,841,197
East South Central	61	750,253	60	867,638
West South Central	29	31,721	29	32,333
Mountain	244	980,822	245	1,030,224
Pacific	309	2,733,096	311	2,815,461
Total United States	3,355	11,176,596	3,390	11,720,983

In the foregoing classification Missouri is included in the West North Central States, but it is included in all figures dealing with the South as a whole.

The following table, based on information in the report, shows the percentage of distribution of the developed water-power in the United States by sections for different years:

DISTRIBUTION OF DEVELOPED WATER-POWER IN UNITED STATES, 1910, 1924-27.

Division	Percentage of total in United States				
	1910	1924	1925	1926	1927
New England	24.6	15.3	14.0	13.3	13.1
Middle Atlantic	22.1	19.1	19.4	17.9	17.5
East North Central	9.7	9.1	8.8	8.8	8.6
West North Central	5.1	5.1	5.1	4.7	4.6
South Atlantic	8.8	14.3	15.8	15.2	15.7
East South Central	7	3.8	4.0	6.7	7.4
West South Central	2	2	3	3	3
Mountain	7.4	9.7	9.3	8.8	8.8
Pacific	21.4	23.5	23.3	24.5	24.0

On January 1 the South as a whole had an installed water-

power capacity of 2,760,567 horsepower in 434 plants, an increase of 262,120 horsepower over 1925, or more than 10 per cent, compared with slightly more than a 3 per cent gain in the rest of the country outside of the South.

Nearly one-half of the total increase in water-power development in the United States in 1926 was in the Southern States. The South now has over 23 per cent of the country's developed water-power and is making a greater growth in installed capacity than is shown in the rest of the country.

Consolidations and expansion of hydro-electric power lines in various parts of the South have been constantly under way for the past several years, culminating in the merger of several of the larger power companies in the Southeast in 1926, which are tending to link up the developed water-power resources of the South into one interconnected superpower system.

Construction of steam-electric generating plants, supplementing hydro-electric projects, has also been carried out on a large scale, and many large plants were completed and construction started on others in 1926, using coal, natural gas, lignite and fuel oil for steam-generation purposes. Several water-power projects are now contemplated, one of which, as announced elsewhere in this issue, calls for the expenditure of \$20,000,000 for a great development on the Saluda River in South Carolina.

From the northern line of the South, on the border of Maryland, where the huge Conowingo dam and power development on the Susquehanna River is now under way, which is to be part of a great power system connecting Maryland with Pennsylvania and New York, power projects extending southeast to Florida and southwest through Texas will in a few years make available water-power resources for the generation of electricity to meet the power needs of the rapidly expanding industries of the South.

SOUTH'S DEVELOPED WATER-POWER.
(Plants of 100 horsepower or more capacity, January 1, 1927.)

State	Public utility horsepower	Manufacturing miscellaneous horsepower	Total developed horsepower	Total number plants
Alabama	657,410	1,798	659,208	23
Arkansas	15,550	.....	15,550	4
District of Columbia .....	.....	1,350	1,350	2
Florida	8,650	120	8,770	4
Georgia	426,381	22,289	448,670	62
Kentucky	33,351	904	34,255	6
Maryland	33,825	4,050	37,875	15
Missouri	20,260	300	20,560	7
North Carolina	410,556	132,062	542,618	122
Oklahoma	1,948	.....	1,948	4
South Carolina	543,321	28,107	571,428	59
Tennessee	175,920	1,255	174,175	31
Texas	11,330	3,505	14,835	21
Virginia	96,432	41,614	138,046	62
West Virginia	81,174	10,105	91,279	12
Total South 1927	2,513,108	247,459	2,760,567	434
Total South 1926	2,242,683	255,764	2,498,447	435
United States 1927	9,961,202	1,759,781	11,720,983	3,390
United States 1926	9,399,972	1,776,624	11,176,596	3,355

The total annual production of electricity by public-utility power plants in 1926 was 73,398,000,000 kilowatt-hours, an increase of 11.4 per cent over the output for 1925. Of this quantity about 35 per cent was produced by the use of water-power, an increase of 1 per cent over that for 1926. Electricity produced by the use of fuel increased 9 per cent and electricity produced by water-power increased 16 per cent. It would have required more than 25,000,000 tons of coal to generate the electricity produced by water-power.

About 18 per cent of the total kilowatt-hours of electricity produced by public utilities in the country was in the South.

There was a marked improvement in efficiency in the utilization of fuel in the production of electricity by these power plants in 1926. Although the increase in output by the use of fuels was 9 per cent, the increase in fuel consump-

tion was only about 2 per cent. The average rate of consumption of coal in 1926 was 1.95 pounds per kilowatt-hour, showing a gain in efficiency of about 8 per cent during the year.

To have produced the electricity generated by the use of all fuels in 1926 by the use of coal alone would have required 46,400,000 tons at the average rate of coal consumption in 1926, or 76,000,000 tons at the average rate in 1919, a difference of nearly 30,000,000 tons. This figure indicates the immense saving in coal brought about by the improvement in the design and operation of public-utility power plants since 1919. At the present time at least one plant is using only about 0.85 pound of coal to produce a kilowatt-hour of electricity. If all the electricity produced by electric public utilities in 1926 by the use of fuels had been produced by the consumption of 0.85 pound of coal per kilowatt-hour, the conservation of coal would have amounted to 26,000,000 tons, which is equivalent to about \$100,000,000.

ELECTRIC POWER PRODUCTION BY PUBLIC UTILITIES*

States	1926		
	By water power Kilowatt-hours	By fuel Kilowatt-hours	Total Kilowatt-hours
Alabama	1,317,649,000	280,146,000	1,597,796,000
Arkansas	33,040,000	129,882,000	162,922,000
District of Columbia		381,373,000	381,373,000
Florida	18,219,000	484,255,000	502,474,000
Georgia	596,879,000	94,441,000	691,320,000
Kentucky	64,357,000	449,389,000	513,746,000
Louisiana		393,197,000	393,197,000
Maryland	36,139,000	551,850,000	587,989,000
Mississippi		66,244,000	66,244,000
Missouri	74,365,000	838,222,000	912,587,000
North Carolina	413,881,000	704,708,000	1,118,589,000
Oklahoma	5,829,000	456,545,000	462,374,000
South Carolina	683,512,000	356,246,000	1,039,758,000
Tennessee	556,063,000	336,628,000	892,691,000
Texas	8,533,000	1,482,252,000	1,490,785,000
Virginia	206,155,000	720,180,000	926,335,000
West Virginia	118,061,000	1,689,328,000	1,807,389,000
Total	4,132,682,000	9,414,886,000	13,547,569,000
United States	25,935,920,000	47,462,394,000	73,398,314,000

*Preliminary estimates for the Southern States based on monthly reports, Division of Power Resources, U. S. Geological Survey.

New Hotels for Several Texas Cities.

San Antonio, Texas.—Plans are being made for new hotels in this city, in San Angelo, Abilene and Corpus Christi, Texas, for the Blue Bonnet Hotels Company, of which Floyd Singleton of Houston is president and manager. The San Antonio building will be 113 by 81 feet, 11 stories, fireproof, with concrete foundation and frame, terrazzo and cement floors and built-up asphalt or tile roof. It will cost approximately \$500,000, including \$75,000 for furnishings and equipment. P. E. Silber & Co. of this city are the architects.

Plans have been announced for the erection of a 150-room hotel at Abilene, of seven or eight stories, to be built in 1928. It will have a foundation capable of carrying 250 rooms, each to be equipped with bath, ceiling fans, circulating ice water, airoilite doors, built-in mirrors and other facilities.

In addition to the San Antonio and Abilene hotels, the Blue Bonnet Company plans buildings also at San Angelo and Corpus Christi.

Industries and Resources of East Tennessee.

"The Valley of East Tennessee and the Adjustment of Industry to Natural Environment" is the title given to Bulletin 36 of the Tennessee Geological Survey, Wilbur A. Nelson, State Geologist. It is by Earl C. Case, and consists of a dissertation submitted to the faculty of the Ogden Graduate School of Science in candidacy for the degree of doctor of philosophy, the University of Chicago. It is a most interesting and entertaining document and is abundantly illustrated with photographic reproductions of views in that section of the State which is under consideration. Industries, natural resources and the beauties of the region are all attractively set forth in the 116 pages of the book.

MEAT SITUATION IN 1926.

Beef Production Highest on Record—Declines in Pork and Veal—Lamb and Mutton Highest in 12 Years.

Although fewer food animals were slaughtered in 1926 than in 1925, the total output of meat was larger by 240,000,000 pounds, according to estimates of the Bureau of Animal Industry, Department of Agriculture.

Stock raisers and feeders brought about this result notwithstanding a considerable reduction in pork production. The shorter supply of hogs was known to be inevitable because of losses from cholera and the continued operation of the downward swing resulting from the overproduction in 1923 and 1924. Hogs generally supply more meat than any of the other meat producers, but last year's figures show that for the first time in a long period cattle and calves provided more than swine.

The hog situation apparently presented an opportunity to cattlemen, which was utilized to the full, and beef production in 1926 broke all existing records by a wide margin. It is true that more cattle were slaughtered in 1918, but last year's cattle had much more beef on them.

Sheepmen also came to the fore in 1926 and produced a sizable increase in the supply of lamb and mutton. The production was not the highest on record, but it was the largest in 12 years, or since 1914.

Considering the meat supply in 1926 as a whole, it may be pointed out that the increased production of 240,000,000 pounds was not quite enough to keep pace with the increase in population. As a consequence the per capita consumption fell from 143.6 to 142.8 pounds, or eight-tenths of a pound.

The estimate of total beef produced in 1926 reaches the record figure of 7,458,000,000 pounds, dressed weight. The previous high record was 7,279,000,000 pounds in 1918. Thus, last year's total exceeds the previous record by 179,000,000 pounds.

For some time past the beef industry has been on a strictly domestic basis. The exports and imports in recent years have been almost negligible and to a great extent have balanced one another. For example, exports of beef in 1926 were 38,000,000 pounds and imports 41,000,000 pounds.

The production of veal declined somewhat last year, although it was second only to the high record made in 1925.

Sheep and lamb slaughter has been steadily increasing each year for the last five years. The total yield of lamb and mutton in 1926 was 643,000,000 pounds, which is 20.2 per cent greater than the production of 1922. The consumption per head last year was 5.5 pounds. The actual proportion of lamb and sheep marketed for slaughter at inspected establishments is about 90 per cent lambs and yearlings and 10 per cent sheep.

The history of swine breeding and feeding in the United States shows marked changes from year to year. The latest peak of production occurred in 1923 and 1924. The slaughter fell off very sharply in 1925 and the decline continued last year. However, the available animals were marketed in fatter condition, so the falling off in pork production last year was not serious.

The estimated total pork produced in 1926 was 8,181,000,000 pounds and lard 2,324,000,000 pounds. These quantities provided the usual large surpluses for export, although the shipments of pork (mostly bacon and hams) were the smallest in 12 years. On the other hand, the extra-fat hogs permitted a slightly larger export of lard than was the case in 1925.

Lard is by far the largest single item of animal exports. Last year's exports, 733,165,948 pounds, represented nearly one-third of the production—31.5 per cent is the exact figure.

A ready comparison of meat consumption may be made in

the following table showing the quantities of each kind of meat and of lard per person in the United States for the last three years. The consumption of pork in 1924 is a high-record figure:

PER CAPITA CONSUMPTION OF MEATS AND LARD IN THE UNITED STATES.

	1924 Pounds	1925 Pounds	1926 Pounds
Beef	61.5	62.1	63.4
Veal	8.2	8.7	8.2
Mutton and lamb	5.2	5.2	5.5
Pork (except lard)	74.7	67.6	65.7
Total	149.6	143.6	142.8

Action on Muscle Shoals Is Urged.

Prefaced by an exhaustive report of its study of Muscle Shoals, a special committee of the Southern States Republican League has submitted a series of recommendations for the disposition and operation of that power plant, and the policies advocated have been approved by the executive committee of the organization. Charles U. Gordon of Greenville, Miss., is president of the League and Col. John Stephen Sewell of Birmingham is chairman of the special committee.

First discussing the Muscle Shoals problem in detail, the committee unanimously agreed that the following principles should govern in arriving at a solution of it:

"That the settlement of the Muscle Shoals question on a reasonable and definite basis and without further delay is of the utmost importance.

"That in settling this question the Government itself should not become a competitor of private enterprise.

"That the Government should, however, retain the title to its properties at Muscle Shoals.

"That both nitrate plants at Muscle Shoals be maintained in efficient condition and ready to operate until such time as the Secretaries of War and of the Navy shall certify that this is no longer necessary for purposes of defense.

"That, whatever the plan of disposition of Muscle Shoals, all power there generated and not immediately needed in the production of fertilizer shall be widely distributed at equitable rates to consumers everywhere within the limits of economical transmission."

Levee and Flood-Control Contracts of \$621,000.

Contracts have been awarded by the Cameron County Water Improvement District Commissioners, Brownwood, Texas, to the Trinity Farms Construction Company, Waxahachie, Texas, for proposed levee and flood-control work, according to a letter to the MANUFACTURERS RECORD from Oscar C. Dancy, county judge of Brownwood. The proposed work will include the North floodway, for which contract was awarded at \$467,457, and the Arroyo Colorado floodway at \$176,295. Contracts were on the basis of nine cents per cubic foot for removing approximately 5,000,000 cubic feet of earth and \$25,000 per acre for clearing and grubbing, the contractors to have the timber. The time limit on the Arroyo work is 135 days and on the North floodway 300 days, with 600 days for clearing and grubbing. If rights of way are secured in 60 days, it is planned to do other work on the Arroyo with a limit of 300 days. W. O. Washington, Brownwood, is the county engineer.

Contracts on \$550,000 Hospital in Texas.

W. L. Pearson & Co., Inc., Edinburg, Texas, general contractors for the erection of a new city hospital at Edinburg to cost approximately \$550,000, including \$150,000 worth of furnishings and equipment, advise the MANUFACTURERS RECORD that they have sublet contract to R. W. Briggs & Co. of Pharr, Texas. As previously announced, the structure will be of reinforced concrete and brick, 4 stories, 152 by 41 by 63 by 36 feet, with concrete foundation and composition roof. Gliesecke & Harris of Austin are the architects.

SULPHUR AND PYRITES IN 1926.

Record Sulphur Shipments Made Last Year, All From the South.

Practically all the sulphur mined in the United States comes from the South. The production of sulphur in 1926 amounted to 1,890,057 long tons, compared with 1,409,262 long tons in 1925, an increase of 34 per cent, according to the Bureau of Mines. The salient feature of the sulphur industry in 1926, however, was the record-breaking shipments, which totaled 2,072,687 tons, valued at approximately \$37,300,000, compared with 1,858,003 tons, valued at approximately \$29,000,000 in 1925, the previous record year. Production figures were second only to those of 1923 and, while still about 183,000 tons less than shipments, were closer than they had been since the closing down of the Sulphur mine, Louisiana, in 1924. Over 99.9 per cent of the production was made by two companies in Texas, while over 99.9 per cent of the shipments was made by these companies and the company in Louisiana, which is still shipping from stocks. The record shipments of sulphur and the reduced rate of exportation in 1926 indicate record-breaking domestic consumption in that year. Stocks at the mines were reduced to 2,060,000 long tons at the end of the year.

The price for sulphur was considerably higher in 1926 than in 1925. Chemical and Metallurgical Engineering quoted a range of \$17 to \$19 a ton f. o. b. mines, the lower price holding for the first three months of the year and the higher price for the remainder.

Exports of sulphur or brimstone from the United States totaled 576,966 tons in 1926, valued at \$10,918,580, of which 159,416 tons were exported to Canada, 108,477 tons to Germany, 91,735 tons to France, 66,507 tons to Australia, 27,340 tons to the United Kingdom and 26,618 tons to New Zealand. Exports of refined, sublimed and flowers of sulphur totaled 12,002,105 pounds, valued at \$236,146, exported mainly to Canada, Mexico, France and Australia. In 1925 the exports of sulphur, or brimstone, amounted to 629,401 tons and the exports of refined, sublimed and flowers of sulphur amounted to 6,381,791 pounds. The exports in 1926 were second only to the record exports of 1925. Imports of sulphur and sulphur ore for consumption for nine months of the year amounted to 48 long tons and imports of sulphur in other forms for nine months amounted to 160 tons.

The output of pyrites in 1926 was practically at the same rate as in 1925, decreasing from 170,081 long tons, valued at \$650,448, in 1925 to 166,559 tons, valued at \$616,668, in 1926, or a decrease of 2 per cent in quantity. The quantity sold or consumed by the producing company showed a larger decrease, from 170,298 long tons in 1925 to 163,217 tons in 1926. California and Virginia produced 95 per cent of the total output and New York and Ohio supplied the remainder.

Imports of pyrites in 1926 showed an increase of 32 per cent in quantity over 1925, from 276,385 tons, valued at \$773,925, to 366,151 tons, valued at \$856,981, and were the largest recorded since 1919. Of the total quantity imported Spain furnished 365,103 tons and Canada the remainder.

Date Changed for Bids on \$500,000 Hotel.

Jackson, Tenn.—Bids will be received by A. D. Noe, Jr., of the Southern Hotel until March 12, instead of March 5 as recently announced, for the erection of the proposed \$500,000 building to replace the hotel at Baltimore and Liberty streets, this city. The structure will be eight stories and basement, of reinforced concrete faced with terra cotta and brick, and will be equipped with a service elevator and two high-speed passenger elevators. R. A. Heavner of Jackson is the architect.

The Migration of Industry.

THE UNDERLYING ECONOMIC FACTORS OF RISING INDUSTRY IN THE SOUTH AS COMPARED WITH THE NEW ENGLAND SITUATION.

By FRANK PEMBROKE HUCKINS.

[Mr. Huckins, the writer of the following article, is a graduate of the Harvard Engineering School; since 1913 has been president of the Boston firm of structural timber merchants of P. S. Huckins Company, a business closely dependent on the textile industry; is president of Warren-Huckins Company, Jacksonville, Fla., manufacturers of architectural woodwork. He is of New England birth and descent, but has spent as much time in the South as in the North, and is thoroughly acquainted with the subject of which he writes.—Editor Manufacturers Record.]

In the end man's effort to combat economic law is fatuous. The human trait of loyalty to family, to town and to country is a powerful element of civilization. It is all right in its pure state, but when it becomes tangled up with the pocketbook it loses much of its virtue and leads men into passions and obsessions that are ridiculous, if not destructive. This virulent form of loyalty runs all the way from religious bigotry to political "blocs," which sit up nights tampering with economic law.

Recently in the MANUFACTURERS RECORD various parties have waxed purple in the face over the question of how Muscle Shoals shall be developed. I am not an authority on Muscle Shoals, I being one of three men in the United States who admit the fact, but the thought that occurs to me is that, regardless of what political force may momentarily do or not do to Muscle Shoals or any other part of the country, economic law will blithely proceed ultimately to upset anything that is not sound and will use nature's resources eventually in the most effective manner.

In order to understand the migration of industry toward the South a variety of underlying causes running back many generations must be examined. The textile industry in New England has been progressively decadent for a number of years. The same industry is rapidly expanding in the South. Why? Principally due to the dilution of sturdy native blood by the influx North of the least desirable Europeans; partly due to geographical location.

The original settlers of New England were, without doubt, as industrious, as honest and as capable a body of people as could be found on the face of the earth. They founded industries, they worked in the mills, they amassed fortunes. That blood came right on down, until today its influence and its directive power is found in every part of the country—North, East, South and West. But following on the heels of that earlier immigration came a rising tide of humanity of an entirely different order and origin. Until the country awoke to the fact that it had become the dumping ground of the misfits of Europe they swarmed ashore from every ship, and New England, with its great textile mills, soaked up more than its share of this undigested mass.

The result has been a fertile ground for everything from outlaw unionism to burning anarchy. The original stock has become a small, upper-class minority. The mass of the population is "agin" industry. Radical leaders have taught it to do just as little work as possible and to strike frequently for more pay. The fact that this has caused misery and loss to the workers as well as retrogression for the industries is, of course, beyond the intelligence of the worker.

A typical example is the jurisdictional strike that waged, off and on, between two unions in Lynn, Mass., for some 10 years and was only ended after half the boot and shoe industries of Lynn had moved to St. Louis and elsewhere in despair.

In contrast to this picture is the South. By the time of the Civil War the South had made considerable progress in manufacturing. This is evident from the fact that for four years the South was able to produce within her own borders the multitude of supplies and munitions with which to carry

on war, while entirely cut off from other sources. The process, however, consumed itself in the effort. At the end of the war the very means of manufacturing was worn out to the last engine lathe. The population had no recourse but to turn to man's primary work—farming. This blessing in disguise produced a healthy, normal American citizen. He learned diligence by necessity; he learned content on little.

The World War awoke the South. By then industry had gained more than a foothold. It had already proved successful, but it lacked capital and experience. All but the most feverish political partisans will admit that a Democratic Administration during the war was not what you could call a calamity for the South. For the first time in history it had all the capital it could use. Anyone who had the imagination to start an industry readily found the means to do it. After the smoke had cleared away and a number of cuckoo industries, such as concrete shipbuilding, had sunk out of sight, the South was left with many substantial industries, with capital, with imagination and with ambition.

Another factor that has come to pass so gradually that few people realize the change has been the matter of health and sanitation. Fifty years ago a Northerner who attempted to spend the summer in the South would die of typhoid if he were not gnawed to death by mosquitoes or some other crawling, running or jumping insect. In the North the South was generally regarded as an unfit place to live the year round. In the backwoods of Maine they still hold that opinion. Nowadays in the Southern cities if at a July meeting of some chamber of commerce you ask those members who were born in that State to rise, less than half get up on their feet. The others have come from the other 47 States of the Union. Thanks to a combination of civic pride, good government and medical science, the South is probably as healthful a place to live as anywhere in the world, and this, plus the very fact that there has been an influx of the best elements from other parts of the country, has stimulated the South immensely.

The ease of living contributes tremendously to successful industry. The cost of keeping warm in the winter in the North is far higher than the price of keeping cool in the South in summer—the difference between several hundred dollars' worth of coal and heavy clothing, on the one hand, and an electric fan, on the other. This factor, together with the American-bred workman, emasculates the efforts of the radical labor organizer. Men who are content, who live in comfortable surroundings, "can't be bothered" with strikes. Thus most of the effort to unionize the South has hit a stone wall. It finds nothing to feed on. The result is better work and more happiness.

A further obvious factor is geographical location. There can be no real nor permanent competition between two equally well-managed, equipped and operated concerns, one of which is located 500 miles farther away from fuel, 1000 miles farther away from raw material and 300 miles farther away from its center of distribution. This is substantially the case in the matter of textiles and many other bulk materials. The result is that many of the New England textile concerns have built mills in the South to gradually

move their entire production to the more favorable location; in fact, New England capital and New England experience are now welcomed to the South, with no thought of sectional jealousy or long-dead Civil War antipathy.

It is as absurd to believe that industry in New England will wither all along the line as it is to expect that the South will soon put New York and Chicago out of business, nor is it desirable that any section of the country should retrogress for the benefit of any other section, bawling militant sectional loyalty to the contrary notwithstanding. It is doubtful if a micrometer caliper will ever be turned out elsewhere equal to the New England brand. The fine old New England craftsman has concentrated on those articles of manufacture which require the highest skill and generations of experience to produce. It will be many generations before anyone will successfully imitate the fine tools, silverware, clocks, jewelry and machinery of Massachusetts, Rhode Island and Connecticut.

The South, on the other hand, will gradually become the national manufacturing center of bulk materials—textiles, chemicals and building materials—requiring large mechanical powers and semi-skilled operatives, which in themselves engender innumerable small industries to support the large ones, not to mention agriculture.

Evolution of this kind will not only conform to economic law, as offered by the population, climate, raw materials, transportation and distribution of the different sections, but will hold the country as a united and balanced entity.

All of which will fail to move the local orator who proposes to shut off Niagara Falls so that Eel Rapids may be developed in its stead.

Uncle Sam Eats More Bread.

The Department of Commerce announces that the commercial bakeries of the United States reported, for 1925, products valued at \$1,267,857,169, an increase of 12.9 per cent, as compared with \$1,122,906,314 for 1923, the last preceding census year. These amounts do not include the value of bread, rolls, pastry, etc., baked by hotels, restaurants and boarding houses.

Of the total for 1925, \$1,075,065,813, or 84.8 per cent, represents products reported in detail and \$192,791,356 represents products reported only in lump. The output reported in detail was distributed as follows: Bread, rolls and coffee cakes, 7,323,703,237 pounds, valued at \$594,377,068; biscuit (crackers, sponge goods, sweet goods and machine-made cookies), 1,197,387,046 pounds, \$242,985,753; soft cake (pastry, pound cake, package cake, fruit cake and doughnuts, both hand and machine made), \$170,496,714; pies, \$55,356,713; pretzels, 27,527,088 pounds, \$4,906,386; miscellaneous products, \$6,943,179.

Of the 17,681 establishments reporting for 1925, 582 were located in Missouri and 419 in Texas.

Wants Woodworking Machinery for Boys' School.

The De la Howe State School, a free home and school for normal destitute children, at Willington, S. C., has installed a sawmill on a tract of 1300 acres of timber lands it owns, and now plans to install woodworking machinery to train the boys in general carpentry and manual arts. J. B. Branch, superintendent, writes the MANUFACTURERS RECORD as follows: "I am writing to learn if there are any woodworking machinery firms that might take an interest in assisting us to fit up our shop, either through the gift of machinery or reduced prices on this machinery."

Bids will be received until March 8 by the Board of Education, Tulsa, Okla., for the purchase of \$750,000 of school bonds.

\$1,500,000 Bond Issue Proposed for Baltimore Airport.

A bill authorizing a bond issue of \$1,500,000 to be used for acquiring and equipping a suitable airport for Baltimore will be presented to the General Assembly, now in session, according to an announcement made this week by Mayor Howard Jackson. This action is the result of recommendations of the Airport Commission, which submitted its report last week.

Much interest in the proposed airport is being shown by Baltimore industry and business. Last Wednesday the speaker at the luncheon of the Association of Commerce was Major William P. McCracken, assistant secretary of the Department of Commerce. His subject was: "The Development of Commercial Aviation and Baltimore's Relation to It As an Airport." He pointed out that commercial aviation is growing at a rapid rate and that factories engaged in the production of planes for this service have large orders on hand, indicating that this year many new lines will be started and additional planes put on routes now established. Big sums of money are being expended, he stated, to light the airways and make night travel safe. Work is under way in connection with lighting the New York-Atlanta air route, and regular mail service will be inaugurated this summer.

To Make Oklahoma More Widely Known.

Oklahoma City, Okla.—Col. W. S. Key has resigned as warden of the State Penitentiary at McAlester to become directing head of Oklahomans, Inc., a subsidiary organization of the State Chamber of Commerce, of which N. R. Graham of Tulsa is president. The new manager will have full charge of the organization, which plans a publicity campaign for making the resources and opportunities of Oklahoma more widely known. In addition to compiling data on State resources, attention will be given to raising additional funds. A total of \$215,000 has already been secured in cash and agreements for advertising space in periodicals, but it is the purpose of the organization to raise a total of \$400,000.

The beginning of a definite campaign for compilation of information and State and national advertising, it is said, will depend upon the organization by Colonel Key of a force of helpers and co-ordination with the aims of the State Chamber. As supplementary advertising, 20 booklets will be published and distributed.

Chesapeake and Delaware Canal Open.

Col. Earl I. Brown, United States Engineer Office, Wilmington, Del., has issued for the information of navigators the rules and regulations which govern the use, administration and navigation of the Chesapeake and Delaware Canal, which has been improved to a sea-level waterway connecting the Chesapeake and the Delaware bays and is now open for use. The speed limit in the canal is six miles an hour, but in passing other vessels, whether the latter be in motion or not, speed must be reduced to three miles an hour. Vessels of more than 12 feet draft should not attempt to use the canal.

10-Story Building for Real Estate Board, San Antonio.

Charles J. Rush, secretary of the San Antonio Real Estate Board, advises the MANUFACTURERS RECORD that details regarding the erection of a proposed building at Martin and St. Mary's streets, San Antonio, for the Real Estate Board have not been completed. The building will be 10 stories, facing approximately 50 feet on North St. Mary's street, with a depth of 100 feet on Martin street. Adams & Adams, San Antonio, are the architects.

South Leads in Wood Utilization Practice.

REFORESTATION IS THE KEYNOTE OF SOUTHERN FOREST INDUSTRIES.

The South today leads the country in wood utilization practices, says Axel H. Oxholm, director of the National Committee on Wood Utilization of the Department of Commerce, in his report to Secretary Hoover, chairman of the committee. Mr. Oxholm has just returned to Washington from a three weeks' tour through the Southern States, where he addressed a number of lumber retail and manufacturers' conventions in the interest of the utilization of short lengths and end-matched lumber. He summarizes his impressions as follows:

There is a keen interest in the South in reforestation. Operators in Bogalusa, La.; Elizabeth, La., and others are doing wonderful work along these lines. In nearly all cases of reforestation on a large scale it was found that this step has been taken because the close utilization of raw material enabled the reforesting companies to go to this heavy expense. The pulp and paper industry is highly developed in certain sections of the South, and even branches of Southern pine are gathered in the woods and converted into kraft paper. It is a well-known fact that the Southern States, particularly those in the Gulf of Mexico region, offer better possibilities for reforestation of soft woods than any other regions in the civilized world. Incomplete utilization of timber has been one of the most important drawbacks to reforestation in the past. The effects of reforestation is best seen at Bogalusa, La., this most remarkable of all wood utilization centers, where the faith in the growing of millions of saplings enables the building of permanent mill structures, investing millions of dollars in town development and not to forget a quarter of a million dollars in a pulp and paper research laboratory.

Contrasted to these conditions, one may compare dozens of other typical sawmill towns back of which is a few years, or perhaps a few months, of timber cutting, the mill equipment is not kept up, no improvements are made because the raw material supply will give out in short time, and one day the entire town, sawmill, yards and everything will be knocked down to the highest bidder for a fraction of the original investment. It is evident that the mills operating on a permanent basis, perpetuating their timber supply through reforestation, will take the lead in efficient wood utilization, and such is also the case. This class of operations will soon be typical in the South.

The butt of Southern long-leaf pine is often defective, and for this reason stumps of 18 to 24 inches are frequently left in the woods. At Kaulton, Ala., it has been found that the butts of these pine trees make good shingles, and this enables cutting the trees closer to the ground. The same plant, which devotes considerable attention to seasoning practice with much apparent success, has found that high-grade lumber should be stored under cover for two to three weeks after it has been kiln dried. This temporizing process greatly improved the finish of the lumber when dressed. It is no wonder that this company is proud of its product and is grade-marking every stick which leaves the mill.

At Bogalusa, La., an end-matching machine is now being installed. This company has for some time successfully operated a plant extracting turpentine from sawdust, operating what appears to be a most ingenious device. The development of this town of 17,000 inhabitants, all dependent on the forest industries developed in that locality for a living, is largely due to the executive

ability of Col. W. H. Sullivan. There is no need for going to Europe to study the effect of reforestation and close wood utilization, since the Bogalusa plant seems to incorporate the most advanced ideas in this direction.

A filer at Electric Mills, Ala., has invented a method of shaping the saw wheels which eliminates much of the vibration and increases the resistance power of the front edge of the saw. By this method the saw gauge has been reduced from 13 to 16 B-W-G. This means a saving of one-sixteenth inch. A personal inspection revealed the fact that the speed of the operation had not decreased and the usual washboard finish had been nearly eliminated. There seems no doubt but that this invention is one of merit.

The production of end-matched lumber is steadily increasing at Elrod and Lockhart, Ala., and new uses are constantly being developed for this stock. At Lockhart a speciality is made of end-matched flooring, which will be laid with the high-grade on the border and tight-knotted stock under carpets and rugs where these defects will not be visible. In this manner prospective home owners will save considerable money and still have a very serviceable floor.

All through the South there is an increased interest among progressive sawmill operators in refining the raw material to the greatest extent. The question of properly seasoned lumber has come to the foreground and there are several plants who will guarantee a certain low moisture content on their shipments. It cannot be said, however, that this is the rule, but the industrial consumers have shown an increased tendency to make these stipulations.

Following the example of other suppliers of raw materials, the lumber industry, both hardwood and softwood producers in the South, have realized that it is not profitable business to ship lumber of common grades to the consuming plants in the North, where such stock is cut up into smaller sizes, eliminating the defects. The small-dimension production at the source is, therefore, a burning question. The complaint of the manufacturers is that there are too many mills in this business not properly equipped to season the stock, and as a result the consumers are not satisfied and go back to the old method of buying common lumber. Furthermore, the consumers do not, as a rule, figure their cost or it is said they may be unduly strict in their inspection of small-dimension stock cut at the source. If the consumers cut their own small-dimension stock they are more prone to overlook defects. Therefore, the new Association of Dimension Lumber Manufacturers will make an effort to establish a uniform cost-accounting system and the consumers will no doubt derive a considerable benefit from the application of this cost system to their own operations. Stone, steel and a number of other raw materials are supplied cut to exact sizes needed. So there seems no reason why the same system could not be applied to wood. The standardization of the requirements of the consumers is an important part of this work. The opinion seems almost unanimous that the building up of a steady trade in this line and a reliable source of supply will encounter extreme difficulties as long as inefficiently operated lumber mills are induced to spoil the chances for those who are willing and able to go after the business in a rational and scientific manner.

The question of the marketing of short lengths of soft wood is receiving considerable attention. While the distributors, as a rule, are willing to consider the matter particularly in view of the discount at which such stock is sold by the lumber mills, it is contended in many quarters

the difficulty in the way of a larger distribution seems in most cases to be in the fact that the distributors do not always pass on the discount, or at least do not, as a rule, offer the consumers sufficient inducements to make this stock move. Many consumers are using large quantities of short lengths, particularly the ready-cut house manufacturers, who are offering severe competition to retail lumber dealers because the purchasers of ready-cut houses are benefited by the saving which the use of short lengths entails. All through the Southern pine territory the value of the grade-marking system seems to be well understood and appreciated. In several instances consumers order their lumber by brands and grade marks, and the distributors find that this has the effect of stabilizing the demand and decreasing unfair competition. Building and loan associations and banks now realize that houses in which properly grade-marked lumber from recognized mills have been used offer better security, and the matter of grade-marked lumber is now coming to the foreground in connection with the movements of the "Certified House."

Thornton Estes, president of the Estes Lumber Company, Birmingham, Ala., and M. E. Meacham, president of the Goodfellow Lumber Company, St. Louis, Mo., are both keen believers in making exclusive sawmill connections. Both believe in grade-marked lumber as an aid in merchandizing. These two concerns prominently display the names of their mill connections on their salesmen's car doors and on their lumber sheds. It is evident that the sawmills, in turn, would be induced to give such distribution methods preferred treatment, and many other retailers have found that this Old-World method of handling lumber sales is the most efficient, economical and satisfactory from every point of view. After all, is it not the same merchandizing method which is followed by dozens of other manufacturers in different lines? If lumber is sold on a quality basis it should not be hawked. The consumer will soon learn the difference between poor lumber and good lumber if the sales are properly handled.

The speculative builders have received a severe setback in many localities where effects of the use of unseasoned lumber now begin to show. Mortgages expiring at the end of the first three-year period are not renewed in many instances where shoddy construction has been used. As a result, the home owner frequently blames lumber. It is, therefore, a matter of great interest to reliable builders to receive well-seasoned stock, and if the home owner knew that the extra cost of seasoned lumber does not exceed \$25 to \$50 for the average small house they would certainly insist on such material.

It seems to be the unanimous opinion of most sawmill operators in the South that it is not profitable to concentrate on one specification or one grade of small-dimension products, and that unless a market can be found for what may be termed as off-fall or off-grade stock success will not be attained. For instance, in the manufacture of small-dimension stock a considerable percentage of stock is spoiled in seasoning. This waste can be lessened by reducing this waste lumber to smaller sizes. This problem has been solved at the dimension plant at Cairo, Ill., where many smaller wood specialties, such as box cleats and other items, are made from waste at the dimension mill.

The interest among Southern lumbermen in the work of the National Committee on Wood Utilization is regarded as very gratifying; they realize that the committee is a logical meeting place for manufacturers, distributors and consumers, and that through its medium many of the difficulties now existing can be ironed out. Closer utilization is the key to commercial reforestation, and the future of the South depends on the success in this direction. For this reason the work of the National Committee on Wood Utilization is receiving splendid support from all sources.

\$400,000 Apartment Building for Charlotte.

The new Addison Apartments at Charlotte, N. C., recently completed by the Addison Realty Company of that city at a cost of approximately \$400,000, contain 64 suites with a total of more than 200 rooms. The building is modern in all details and is equipped with the most approved facilities, including electric refrigerators, incinerators, dumbwaiters, two passenger and two freight elevators. The structure is



NEW ADDISON APARTMENTS COMPLETED AT CHARLOTTE.

nine stories, 155 by 56 feet, of steel, brick and concrete, with Barrett roofing, tile, concrete and hardwood floors, metal doors and steel sash and trim. Garages will be provided in connection with the apartment. Willard G. Rogers is the architect and the J. A. Jones Construction Company general contractor, both of Charlotte.

Sub-contractors on the building include the following, all of Charlotte: Ornamental Stone Company, stone work; Montieth-Soule Company, ornamental iron; J. H. Wearn & Co., millwork; L. G. Cruse, painting; G. G. Ray & Co., roofing; Belk Department Store, linoleum floors and window shades; Hunter Electric Company, electric work; J. A. Haley & Sons, plumbing; C. W. Christian, heating; Smith-Wadsworth Hardware Company, hardware and kitchen equipment; Luke Seawell, elevator doors; Triplett Lumber Company, hardwood floors; McDaniel-Federal Company, marble; Electric Products Company, Frigidaire; Southern Public Utilities Company, gas ranges; J. D. Love, plastering; Banner Furniture Company, mattresses; W. T. McCoy, rugs and living room furniture, and the Parker-Gardner Company, for social room furniture. Contract for bedroom furniture was awarded to the B. F. Huntley Furniture Company of Winston-Salem, through Eird's Department Store of Charlotte.

Officers of the Addison Realty Company are J. A. Jones, president; J. H. Little, vice-president; Edwin L. Jones, secretary and treasurer. These, with the following, comprise the board of directors: Dr. J. P. Matheson, Dr. P. M. King and J. H. Dunivant.

The demand for apartments in the new building has been such that the company has recently authorized Mr. Rogers to prepare plans for an addition to consist of 64 small units.

Movement to Reclaim 100,000 Acres.

Anahuac, Texas.—A movement is under way here for reclaiming 100,000 acres of Chambers county land, which is especially adapted to growing rice truck, oranges and figs. The water supply has, however, been contaminated with salt and application has been made to the National Reclamation Commission to dam the salt water out. Stewart R. Smith is president and L. R. Miller, county judge, is secretary-treasurer of the Fresh Water League of the county.

Many Innovations in New Beam and Column Sections Produced by Carnegie Steel Company.

The Carnegie Steel Company on January 1 issued a pamphlet announcing a new series of beam and column sections, 8, 9, 10, 12, 14, 16, 18, 21, 24, 27 and 30 inches in width and weighing 21 to 306 pounds per linear foot. They appear to exceed previous maximum weight per foot by $16\frac{1}{2}$ pounds and maximum width by about one inch. The series includes 41 sections with 161 weights, with innovations applying notably to contour, range and column design, some entirely new and some new as regards American practice.

The general contour of all sections is similar and the flanges are of uniform thickness throughout their width, which feature, it is pointed out, increases the strength of the section by disposing most of the metal as far as possible from the neutral axis; permits simple connections; facilitates fabrication; makes possible their use as either beams or columns, reducing the variety of sizes that need be carried in stock; permits a quicker cycle of rolling, and allows a large degree of standardization in shop methods and tools.

American beam practice is fully reviewed by the company as follows to show the significance of the range of depths of the new series:

Forty years ago the largest beam section rolled was 16 inches, supplementing the previous 12-inch maximum. In 1889 the 2-inch beam was produced, followed by a 24-inch size in 1890 and the interpolation of an 18-inch section. In 1896 the American standards, then comprising 8, 9, 10, 12, 15, 18, 20 and 24 inch sections, were adopted. About 1908 26, 28 and 30 inches were offered, with an interpolated 22-inch depth, and shortly thereafter sections of 21 and 27-inch were produced. Last year new joist beam sections with very narrow flanges and light weights below 12 inches were introduced. Thus, the ranges below 12 inches and above 18 inches are covered by a variety of depths, but the range between 12 and 18 inches, in which occurs the greatest normal tonnage demand, was left with only one intermediate beam depth—15-inch.

To many architects and engineers it is felt the improvement of this last-mentioned situation will be a noteworthy characteristic of the new series. In place of the 15-inch beam, 14 and 16 inch sections are offered. The new series makes the 14-inch section available with dimensions suited for use as minimum weight beams, as well as for columns and heavy girders. The 16-inch depth has not previously been rolled in America.

An interesting chart in the new pamphlet shows graphically that all the section depths of the new series correspond very closely with a progressive series in which each depth is 15 per cent greater than the preceding depth, and it is said that this should permit the designer of a structure to select, in any part of the range, an efficient section very close to his requirements and thus eliminate the use of unnecessarily heavy sections.

The series includes intermediate groups of sections, wider, heavier and stronger than the minimum for each depth that are suitable for use as beams where limitation of depth or maintenance of flush ceilings are important features, and uniformity in fireproofing and finish is facilitated. For example, the minimum weight of the 10, 12, 14 and 16 inch sections have a uniform width of 6 inches.

Railroad engineers will, it is believed, be interested in the efficient sections of 12 inches and deeper, containing no metal thinner than $\frac{3}{8}$ inch, and the complete groups of 24, 27 and 30 inch sections, with flanges 14 inches wide, may find use in structures for eliminating grade crossings and

in other work where limited clearance is a controlling factor in design. The substantial width of these sections makes them suitable, it is said, for use in structures that it is inconvenient to brace laterally.

Considering column design, excess of width over depth and constant depth characterize the series. There are groups 10 inches deep and 12 inches wide, 12 inches deep and 14 inches wide, 14 inches deep and 15 inches wide, permitting a disposition of metal that results in great strength about the critical minor axis, combined with a minimum diameter or fireproofing and finishing, providing thereby a maximum of light, ventilation and usable floor space, say the producers. The new beam sections are said to be the first series that combine the advantages of constant depth with the economy of a rolled as compared with a built-up section. The producers mention the advantages resulting from the use of constant depth column sections as follows: Symmetry of beam, girder and spandrel framework connecting to the columns at successive floors of a tier building, whereby multiple production methods can be utilized to effect substantial savings in drafting room, fabricating shop and erection; the simplification of details on the columns themselves, including the avoidance of fillers under the splices; greater uniformity in fireproofing and finish is permitted.

Sections of constant depth type are offered in two depths, 10 and 12 inches. The first includes weights of 31 to 140 pounds per linear foot, adequate for an ordinary 12-story building, and the other group comprises weights of 75 to 230 pounds, which with the 10-inch groups will suffice for an ordinary 18-story building.

Novel features to enhance the efficiency and adaptability of the series are described by the manufacturers as follows:

Filletts are parabolic, thereby combining maximum spread with minimum area, and their areas are properly included in the calculated weights of the section. Section weights are all expressed in whole pounds. The heavier column weights in the 12-inch group end in zero and stagger with those in the 14-inch group which end in five, thus enabling a designer to change sizes with minimum waste of metal. Catalog weights correspond within one-tenth of a pound to roll dimensions expressed in thousandths of an inch, but tables are given with all dimensions to the nearest sixteenths of an inch. A system of section index numbers whose penultimate figures represent nominal depth in inches facilitates ordering.

The pamphlet shows the profiles and properties of beam sections arranged for application under any building code or specification. It is said that supplemental editions will have tables showing the allowable load to which the sections may be subjected, either as beams or columns, in accordance with the codes of several of the country's principal cities, and others will cover similar loadings under the specifications of the American Institute of Steel Construction and the American Railway Engineering Association.

Plans for \$1,000,000 Cafeteria.

Louisville, Ky.—Plans are being made by Clarence E. Merriam of this city and associates for the erection of a six-story building at 646-48 South 4th street for a cafeteria and banquet hall to cost approximately \$1,000,000. It is understood that a 25-year lease has been secured on the property, which measures 40 by 200 feet, and that work on the building will begin as soon as details can be worked out.

NEWS AND VIEWS FROM OUR READERS

[Publication in this department of letters from our readers does not mean that we either approve or disapprove the views expressed. We believe in a full and frank discussion of the mighty questions of the hour, for only in this way can the truth be found. Therefore, we often publish letters with which we do not agree.—Editor Manufacturers Record.]

Out of Deflation's Wreck and Ruin the South Is Emerging Into Prosperity.

N. C. HUGHES, Contracting Engineer, Columbia, S. C.

Your article which appeared on the cover page of the MANUFACTURERS RECORD of December 16, 1926, with the caption "The Cause of Agricultural Depression and Western Bank Failures" seemed to me to be one of the most logical and comprehensive reasons thus far advanced for the great and onerous depression in business and in agriculture and banking that has existed in the South and West since the days of the deflation to which you refer.

As to the why or wherefore, whether one man or two men or a group of men, representing whatever financial or Governmental power or powers, was responsible for the drastic and far-reaching results of such action, there nevertheless exists undeniable evidence that somebody blundered. Doubtless some of the losses due to the effects of this blundering are irreparable.

Small fortunes and possessions, the reward of a lifetime's labor and saving, were suddenly wiped out, never to be recovered. Homes and property, and in many cases savings, of earnest, hard-working people, who had them all but secured at the time, were lost, never to be repossessed. In many instances death came to the losers and left widows and orphans insufficiently provided for. In other cases initiative to start over again was either deadened for some time or killed outright. Therein, perhaps, lies some of the "crime" that you mentioned.

The only criticism that might be made of your caption is that you could safely and without refutation have included the word "Southern" bank failures. Numerous bank failures, as you know too well, have happened in practically every Southern State since deflation, especially in those commonly called "the Cotton States." Some of these failures were due to improper and unsound, if not dishonest, banking methods, and would therefore have happened in due time anyhow, anywhere and at any time under similar management, direction and manipulation. But the large majority of the failures, I take it, were honest ones and unavoidable, due to the terrifically sudden change and drop in values and the consequent helpless and unbalanced economic situation brought about without warning. The whole banking system was woven through and through with interlocking interests, this banking institution co-operating with and depending upon that banking institution. Loans of varied kinds, both large and small, were in vogue. The larger banks, besides carrying their regular customers, were in addition, perhaps, straining their strength and resources in carrying discounted notes from the smaller country banks; these had initiated the loans upon such securities as at the time they deemed ample and safe and easy to be liquidated. And then came deflation, ruthless in its method and speed. The inevitable economic result was that the vast majority of outstanding loans became what was aptly termed "frozen loans." Those that have not been liquidated in the due course of time are still so termed.

These frozen loans were of many different kinds and classes. In the cotton-manufacturing districts, for instance, there were large sums borrowed on mill stock margins,

though these loans were not necessarily restricted to the immediate industrial centers. Traders in mill stocks existed far and wide. When deflation came, mill stocks dropped far below par almost overnight, and, of course, margins went below zero, and consequently practically all loans on them became frozen. In the agricultural districts what happened? The dry goods, grocery and hardware merchants had, in the regular course of business, negotiated loans to enable them to carry over a certain period their time customers, as well as perhaps to discount their bills promptly. The time customers bought from the merchants with the expectancy of paying their debts so contracted out of the proceeds of the sale of the cotton they raised. It is remembered only too well just what happened to cotton about that time. The price slid down from forty cents a pound to around ten cents in less than sixty days—at least twelve to fifteen cents below the cost of production at that period. Naturally, business chaos reigned. The time customers could not pay their debts to the merchant or their notes at the banks, and the merchant, in turn, could not promptly meet his obligations at the banks. All loans became frozen.

The almost unbearable burden of carrying these loans fell upon the shoulders of the banks, who, stoically, hopefully and graciously, placed them in cold storage for a better day. Only an all-wise Providence knows what would have happened had they chosen to act the part of Shylock.

Along with the slump, values in real estate tumbled. Huge sums were at the time loaned upon real estate, both on purchase prices and on real estate developments. All of these loans became frozen. Many of them are still land-locked, and will continue to be for some time to come. Great and valuable development projects had to be stopped, and any number of them have never been resumed. Why? The result of deflation. There were many other legitimate loans on worthy projects that gave great promise of profit that fell by the wayside for the same reason.

To those who have given the question real thought the marvel has been that business has managed to carry on as well as, and as long as, it has under this staggering blow. The effort to hold up and to keep going through hope, determination and faith on the part of the business men and bankers of the South has been something remarkable and heroic, and worthy to be praised by all good people.

You indeed spoke a truth when you said, "Agriculture must of necessity suffer long and endure much before it can be restored to the conditions existing prior to deflation."

But, in spite of it all and through it all, and perhaps on account of it all, a new day is breaking for the South. A renewed courage, a stronger determination and a deeper faith, all born of adversity and hardships, have sprung up in the heart of the South, and a vision of greater achievements and higher ideals is abroad in the land. Time only, I believe, is needed for the South to come back on a firmer foundation than ever before.

The Southern Ice and Utilities Company, J. W. Dawley, manager, Texarkana, Ark.-Texas, has awarded contract to the E. W. Sproul Construction Company, Chicago, for building an ice plant at Prescott, Ark., to cost about \$200,000 with equipment.

THE IRON AND STEEL SITUATION

Little Variation in Steel Activity.

Pittsburgh, February 28—[Special.]—Generally speaking, demand for steel has been increasing continuously since the first of the year, though changes from week to week are scarcely perceptible. The market is probably as active now as can be expected, for the experience of three successive years has been that of heaviest production occurring in March, suggesting rather strongly a definite seasonal influence.

While the steel trade experienced a backset in volume about three months before the close of the old year, it has not been losing further ground, but instead it seems to be making up some of the loss. Production in November and December was 10 per cent under that in the same months a year previous, but January showed a smaller deficit and in the month now closing mill operations have been close to the rate of the preceding February. The steel industry is running at about 85 per cent, against 81½ per cent in January, while in January and February of last year the rate was practically constant at 88 to 89 per cent. Whether March will show a jump, as March usually does, remains to be seen.

Steel demand is fairly active all along the line, with little variation between the consuming industries, practically all being moderately active and none especially active. An exception to this general principle is line pipe, in which there has been unprecedentedly heavy buying, particularly for this time of year. Two or three large orders for extended delivery were placed late in the old year and there has been much buying in the past few weeks, with more business now under negotiation. The demand has been chiefly for natural gas lines, largely in the South. Pipe mills are now well filled with business in the largest sizes. Demand for oil and gas well material, in casing, etc., increases slowly, while there has been only a slight increase in demand for merchant or standard pipe.

Production of passenger automobiles and trucks in the United States and Canada in January totaled 240,506, representing 44 per cent increase from December and 21 per cent decrease from January, 1926. The production was 67 per cent of last year's monthly average.

Bookings of fabricated structural steel in January totaled 171,720 tons, representing 54 per cent of the fabricating shop capacity, against 71 per cent in December and 58 per cent in January a year ago.

Bars, shapes and plates are steady at their recent declines, which averaged close to \$2 a ton. The larger mills are making some effort to restore the former prices, perhaps chiefly with the idea of forestalling declines.

The strip mills have reacted against the three-month decline in their market and have announced advanced asking prices, at 2.30 cents for widths under 6-inch and 2.10 cents for wider strips. The market had been 1.90 cents to 2.10 cents, with most of the tonnage going at 1.90 cents or thereabouts and with little or no distinction as to width. The new prices have not had much test as yet.

The sheet market on the whole has grown a shade softer. It appears that some large tonnages of automobile sheets have been sold at the full price of 4.15 cents and galvanized sheets are quotable the same as a week ago, at 3.65 cents to 3.75 cents, but black sheets are off at least \$1 a ton, sales at 2.75 cents being quite common, and blue annealed sheets show a wide range, according to district and character of order.

Wire products are perfectly firm in the general Pittsburgh area but are being shaded in some sections of the South.

Since the first of the month pig-iron has declined \$1 a ton

at Buffalo and 50 cents in both the Cleveland and Chicago markets. The Birmingham market has held steady since its \$2 decline early in January. The valley market is perfectly steady as to prices, but the turnover is very light. Pig-iron consumers appear to have no fear as to second quarter supplies from furnaces using Connellsville coke despite talk in some quarters that there may be labor trouble in the coke region when the general union bituminous coal strike occurs.

Continued Favorable Outlook at Birmingham.

Birmingham, Ala., February 28—[Special.]—The third month of the year will start with furnace interests practically sold up so far as the next 31 days are concerned, with some tonnage of the probable make of the second quarter of the year disposed of and prospects bright for continued buying. The buying movement of the first of the year was of consequence, bringing about not only warrant for blowing in two blast furnaces on foundry iron, but also absorbing much of the surplus stock of iron, there being less iron on yards today than on December 1, last. The selling lately has been in small lots, customers being cared for right along, but there is evidence that the larger melters will keep up their activity at shops and will require steady delivery of iron. This is especially true with the cast-iron pressure-pipe manufacturing interests of the district, recent announcements being to the effect that lettings call for a large tonnage of iron.

The make in February will present a favorable showing, though there were three days difference in comparison with the previous month. However, the two additional furnaces will be in the estimate. It is admitted that the surplus stock will show decline and will continue in this direction for the next month and longer. Soil pipe and fittings trade is still off, but several of the larger shops in this industry are doing well and are melting iron. Foundries and machine shops are showing a little decline.

The quotation base of pig-iron is firm at \$18, No. 2 foundry, 1.75 to 2.25 per cent silicon. Intimation has been sounded out on a \$19-per-ton price; one statement said that small lots, one or two cars of iron at the time, immediate delivery, was calling for a premium of \$1 per ton. No inquiries have been reported nor sales for delivery during third quarter. But as long as there is steady delivery, with the surplus piles of iron not showing any material increase, more or less satisfaction is noted.

Soil pipe and fittings are still going slowly, though survey shows some of the larger producers enjoying fairly good demand and producing steadily. However, warehouse stock is large and a number of the shops are lagging. In a number of the specialty shops, where iron is melted daily, there is also a little quietness reported.

Basic iron is produced on a larger scale in this territory than foundry, but none of the stock is offered on the open market. Tennessee Coal, Iron and Railroad Company and the Gulf States Steel Company have practically all of their open-hearth furnaces operating, with the greater number of their finishing mills and shops in full operation. These interests carry some surplus stock in basic. The steel market appears to be improving and steady shipments of various shapes are being made. Wire and nail demand has taken on some improvement recently, while lighter shapes in general are also moving. In rail and railroad accessories there has been activity for some time. Plate and bars are also moving.

Development of the Warrior River barge service is con-

tinuous. Purchase of a site for terminals in Ensley, for distribution of freight brought upsteam, is among the latest announcements. Bids will be taken shortly on a new tow-boat. The building of four sea-going barges at Mobile, two to be completed within the next 30 days, will also be an addition to the service. The Tennessee Coal, Iron and Railroad Company is working up a broader market for steel products in the Southwest, shipments being via New Orleans, thence to Baton Rouge, La., by water and then through rail distribution. This market will by rights come to this district, heretofore supplied to a great extent by water transportation from the Atlantic Coast.

Break in the old-material price list was considered of bad omen on the pig-iron market. However, furnace interests have not taken the occurrence in that light. Scrap prices have been weak for many months and the larger consumers made an offer for stock and purchases followed. Cast and heavy melting steel are prominent now in the old-material activity. There is very little of the other old-material products moving, practically no railroad wrought at all selling here. However, all dealers in old material have their hands full filling orders under specifications of the district for the scrap that is selling. Heavy melting steel purchases are being made with the idea of long activity.

The coke market still shows signs of being held down by reason of the warm weather. The by-product coke ovens are in operation. Some coke is being shipped from the State. Coal production is also affected by the unseasonable weather, demand for domestic coal in particular being off. Production in this State still is around 400,000 tons a week. The indications of a cessation of operations April 1 in the central competitive district may be of help to the coal industry of this section later on. Operators here note the large amount of bituminous that has been stored up. It is also the belief that the cessation of operations will not continue so very long. Only in an emergency will Alabama coal be called into action. In that case this district can supply around 50,000 tons a week and more. The prospect of a strike in the central district has not yet aroused great interest in this open-shop territory.

Quotations for pig-iron and iron and steel scrap follow:

PIG-IRON.

No. 2 foundry, 1.75 to 2.25 per cent silicon, f. o. b. furnaces, \$18.00; No. 1 foundry, 2.25 to 2.75 per cent silicon, \$18.50; iron of \$2.75 to 3.25 per cent silicon, \$19.00; iron of 3.25 to 3.75 per cent silicon, \$19.50; iron of 3.75 to 4.25 per cent silicon, \$20.00; charcoal iron, f. o. b. furnace, \$20.00.

OLD MATERIAL.

Old steel axles	\$16.00 to \$17.00
Old iron axles	16.00 to 17.00
Old steel rails	12.50 to 13.00
Heavy melting steel	12.00 to 13.00
No. 1 cast	15.00 to 16.00
Stove plate	13.00 to 14.00
No. 1 railroad wrought	11.00 to 12.00
Old car wheels	14.00 to 15.00
Old tramcar wheels	15.00 to 16.00
Machine shop turnings	8.00 to 8.50
Cast iron borings	8.00 to 8.50
Cast iron borings (chem.)	15.50 to 16.00

Large Acreage of Cuban Land to Be Developed.

The Caribbean Company, Inc., New York city, has taken over the development and financing of the Cuban Plantations Company property of over 3500 acres near Havana, Cuba, according to an announcement by J. B. Taylor, secretary-treasurer. The company will begin developing the property immediately preparatory to growing peppers, grapefruit and tropical products of all kinds. Large tracts of land in the Isle of Pines, south of Cuba and near Key West, will also be developed. Local labor will be used for the most part, but experienced men will be sent from this country to direct the activities.

RAILROADS

BALTIMORE AND OHIO CENTENNIAL.

Railroad Celebrates the Great Growth of Transportation Since Its Birth.

On Monday of this week the centennial of the charter of the Baltimore and Ohio Railroad Company was celebrated with a dinner at the Lyric Theater, in Baltimore, the number of invited guests being about 800. It was on February 28, 1827, that the charter was granted, and on July 4, 1828, ground was first broken for the construction of the line, the purpose being from the beginning to build a "double railroad," that is, a double-tracked line, from Baltimore to the Ohio River. In this purpose, as well as in the fact that it was the first railroad common carrier to be operated in the United States, the Baltimore and Ohio enjoys especial distinction.

Since that day, 100 years ago, when there was no railroad for public use on this side of the Atlantic Ocean, there has been built up a huge system amounting to more than 250,000 miles of line, with many more thousands of miles of second main-line track, third track, fourth track, and, in some instances, fifth and sixth tracks for comparatively short distances, not to mention side track and yard track, which swell the total of trackage to more than 387,000 miles. Also 70,000 locomotives, 2,400,000 freight cars, 57,000 passenger-train cars and 114,000 company's service cars, to say nothing of huge terminal stations and yards, docks, elevators, tunnels and great office buildings, whose occupants number thousands in each of these edifices.

Further, the investment in railroad property runs to more than \$22,000,000,000 and the net railroad operating income each year amounts to \$1,000,000,000, with the gross operating revenues reaching the tremendous total of more than \$6,000,000,000.

The number of railroad employes exceeds 1,769,000, and they receive each year a total of more than \$2,900,000,000 for their services.

Annual traffic figures for the last year show: Freight, 488,500,000,000 net ton-miles; passenger traffic, also for 1926, will show about 37,000,000,000 passenger-miles.

In the days when the Baltimore and Ohio Railroad was conceived anyone who would have expressed an opinion that a railroad would be built to the Pacific Ocean would have been thought insane. Now we have several roads across the Continent, with intermediately related lines covering all parts of our country. In fact, so thoroughly has America been threaded with railroads that some unimportant lines, which were built perhaps without due consideration for the future, are being taken up and other means of transportation have been substituted for them, in conjunction in sundry instances with the trunk lines of railroad which have supplemented their service with buses.

It is particularly pertinent to note that the Baltimore and Ohio is once more a pioneer, in that it has established in New York within the past year a thoroughgoing and popular bus terminal service for the accommodation of its passengers to and from that city; this is the first of its kind.

The part which electricity has played in railroad growth and development must also be regarded in any mention of our extensive railroad system and our railroad practice, which railroad men in other lands have studied to advantage. Ever since the inventor of the magnetic telegraph sent his first message from Washington to Baltimore along the line of the Baltimore and Ohio Railroad, in 1844, the progress of steam and electricity has been side by side, and this railroad, it may be said, was the first to adopt electric motive power

on a large scale in this country, over thirty years ago, when it began operating trains over its Belt Line in Baltimore. From that beginning electric operation on railroads has advanced until now we see immense electric locomotives hauling huge trains of laden coal cars with expedition and economy on certain lines, to say nothing of the wide use of electricity for passenger transportation on other railroads, on street railways and on interurban roads.

In fact, the Baltimore and Ohio Railroad Company has been from its beginning distinguished by a progressive spirit which shows no signs of abatement.

President Daniel Willard represented the Baltimore and Ohio Railroad Company as host at the dinner, and the Governor of Maryland and the Mayor of Baltimore were on the list of guests. Many other prominent men also attended the celebration.

Late next summer and early in the fall there are to be held out-of-door exhibitions, pageants and other features of the celebration of the charter's centennial.

Big Freight Movement to Northwest Texas.

Slaton, Texas, February 26—[Special.]—To meet demands of the oil development campaign in the Panhandle and the South Plains region of Texas, where many test wells are being drilled, the Atchison, Topeka and Santa Fe Railway is handling more lumber and derrick timbers than ever before. This traffic originates along its lines in East Texas, where the mills are situated, and the movement into the oil fields, 700 miles, is continuous over its tracks. Not only are unprecedented amounts of building materials being used by the oil companies, but the local yards are doing a record-breaking business to supply needs of home builders in Northwest Texas. The heavy freight movement has necessitated the expansion of the Santa Fe yards at this division point, the company's track facilities here being increased approximately 50 per cent. Improvements now under way here by the company will cost more than \$300,000.

Santa Fe System Builds Double Track in Texas Panhandle.

Pampa, Texas, February 26—[Special.]—Increased traffic, due to the development of the Panhandle oil field, has caused the Atchison, Topeka and Santa Fe Railway to begin the construction of an additional track between Pampa and Panhandle, 30 miles. At Panhandle the second track will connect with the additional track which the Santa Fe is laying between that town and Canyon, 45 miles. This will give the railroad 75 miles of double track through the heart of the Panhandle section. The cost of the construction between Pampa and Panhandle will be approximately \$1,000,000, according to F. A. Lehman of Amarillo, vice-president and general manager of the Panhandle and Santa Fe Railroad, the subsidiary operating company.

Winter Freight Traffic Continues Large.

Revenue freight loaded in the week ended on February 12 totaled 968,317 cars, according to reports filed by the railroads with the Car Service Division of the American Railway Association. Compared with the corresponding week last year this was an increase of 50,692 cars, while it also was an increase of 64,382 cars over the corresponding week in 1925. The total for the week of February 12 was, however, a decrease of 2575 cars below the preceding week this year. Since January 1 there have been 6,463,958 cars laden with revenue freight, as compared with 6,260,372 cars loaded during the corresponding period of last year and with 6,290,014 cars in the same period of 1925.

Southern Railway Company Data Show Great Increase in Efficiency.

"The Southern Railway Company has been spending many millions of dollars to get more work out of its freight cars," say Case, Pomeroy & Co. of New York. "Improvements in roadway, freight yards and terminals, together with the purchase of more powerful locomotives and of freight cars of larger capacity, have made possible the free movement of greatly increased tonnage.

"During 1926 the Southern moved a volume of freight equivalent to carrying one ton a distance of 400 miles for every inhabitant of the 10 States through which it runs. This vast freight movement represented an increase of about 10 per cent over 1920, which was itself a year of heavy traffic, and an increase of over 60 per cent since 1916. Gross revenues per mile of road in 1926 increased only 4.4 per cent over 1920, while operating expenses were actually reduced 15.7 per cent. It is thus evident that the Southern moved its record volume of traffic in 1926 with greater efficiency and with lower costs than in previous years.

"These results were accomplished largely through better movement of its freight cars. The average number of tons carried per train was increased from 461 in 1920 to 546 in 1926, or 18.4 per cent. This was done entirely through adding more cars to each train, so that every freight train actually delivered more transportation service. The average of cars per train was increased from 31.5 in 1920 to 37.3 in 1926, or 18.4 per cent. At the same time the distance covered by each freight car was considerably increased. Back in 1920 the Southern was able to secure an average daily mileage of only 23.8 per freight car. But by 1926 this daily mileage was increased to 30.4 miles, an increase in actual work accomplished of 27.7 per cent. The one feature which does not show material improvement is the average load carried per car, which was 23.3 tons in 1926, as compared with 23.9 tons in 1920, but the Shippers' Regional Advisory Boards are bringing closer co-operation between shippers and railroads in the matter of efficient car loading.

"The final measurement of the service delivered by a freight car is the number of tons hauled one mile per car per day. In 1920 the Southern secured an average of 407 tons hauled a distance of one mile per car per day. This was increased in 1926 to 457 tons, or 12.3 per cent."

Chesapeake and Ohio Earnings in January.

Increase in gross revenues, net railway operating income and net income of the Chesapeake and Ohio Railway Company, together with improvement in operating ratio, are shown in the statement of operations for January. Gross revenues were \$10,891,147, an increase of \$666,866 over January last year; operating expenses \$7,564,614, an increase of \$47,292; net railway operating income \$2,717,166, an increase of \$417,545. The net income after deductions for interest charges, rentals, etc., for January, 1927, was \$2,065,665, an increase of \$571,803 over January of last year. The operating ratio is 69.5 per cent, compared with 73.5 per cent for January of last year, or a decrease of 4 per cent.

Extension Planned in Lower Valley of the Rio Grande.

Austin, Texas, February 25—[Special.]—Approval has been given by the Texas Railroad Commission to the applications of the Southern Pacific Railway to extend its line from Harlingen to Brownsville, Texas, and of the Missouri Pacific Railroad to build from San Benito southeast to Point Isabel, Texas, both of which are now pending before the Interstate Commerce Commission at Washington. These extensions will

add to the existing network of railroads in the Lower Rio Grande Valley. The Southern Pacific has nearly completed construction of its branch line from Edinburg to Harlingen and has surveyed the route for the proposed extension to Brownsville. The main line of the Southern Pacific is now completed between Edinburg and McAllen and will be extended south to Hidalgo on the Rio Grande.

Large Ballast Contract for "Orient" Line.

Sweetwater, Texas, February 25—[Special.]—What is said to be the largest crushed rock contract ever awarded in this part of Texas has been given the Sweetwater Rock and Gravel Company by the Kansas City, Mexico and Orient Railroad to supply it with between 400,000 and 500,000 tons of crushed rock for the ballasting of the line from Altus, Okla., to San Angelo, a distance of 256 miles. The work, beginning in three weeks, will require four years.

Bontke Brothers and A. D. Hoppertz of Abilene own the Sweetwater Rock and Gravel Company, whose contract exceeds \$200,000. The rock will be taken from the Bob Trammell ranch near Sweetwater. The San Angelo-Sweetwater division will be ballasted first.

Electric Railway Plan, Kansas City to Liberty, Mo.

Liberty, Mo., February 26—[Special.]—Willard E. Winner, pioneer developer, is associated with several Liberty citizens in the organization of a company to build and operate an electric railway from Liberty to Kansas City, 15 miles, and a corporation, capitalized at \$300,000, is being formed. The plan contemplates a branch to the Atwood quarries, where there is a development plan for a cement plant.

Construction plans, according to Mr. Winner, call for a 150-foot right of way, with double track for the entire distance, with roadways on either side. Financing is said to be assured, a big part of it handled by the landowners along the route.

Among those interested are Lee Clark, Mayor of Liberty; C. P. Atwood; A. W. Lightburne; J. A. Reed; Robert Don Carlos, circuit clerk of Clay county; Pascal Parker; Harry Griffith; E. T. Brant; J. W. Pryor; J. S. Conway, and W. E. Barnes, city engineer, all of Liberty.

Planning for Largest Southern Textile Exposition.

Applications for space in Textile Hall, at Greenville, S. C., for the eighth Southern Textile Exposition, to be held from October 15 to 20, inclusive, in 1928, have been received in sufficient numbers to exhaust the capacity of the hall, states an announcement, indicating that the 1928 show will be the largest ever held. To meet the requirements of the Exposition, the Greenville Chamber of Commerce has appointed a committee to co-operate in the construction of an annex larger than the one erected last year. The committee on allotments will begin preliminary work within a few weeks, and preparations will be made extensively to advertise the Exposition.

Moves Offices to Greensboro.

Greensboro, N. C.—General offices of the Swimsafe Bathing Suit Company, branch of the Anderson Hosiery Mills of Anderson, S. C., have been moved to the Jefferson-Standard Building in Greensboro. C. Gadsden Sayre is president and George L. Hall is general manager of the company; the product is the Swimsafe bathing suit, manufactured of pure worsted knit fabrics. The Paragon Underwear Company of Utica, N. Y., is co-operating in the production of these suits and the combined output is about 150 dozen suits per day.

TEXTILE

\$300,000 Silk Mill for Union, S. C.

Regarding a report that officials of a silk mill in Brooklyn, N. Y., have selected Union, S. C., as the location for the plant which will be moved from Brooklyn, Sidney M. Edelstein of New York, who was engaged to select the Southern site, advises the MANUFACTURERS RECORD that the plant will be moved early in April. It is announced that the mill will be a \$300,000 enterprise and that the Chamber of Commerce of Union is promoting a movement to raise \$150,000, the remainder to be subscribed by Northern interests. It is expected that the plant will be in operation within 60 days and will employ from 200 to 300 operatives in the production of glove-silk fabric and underwear.

Mr. Edelstein states that for a number of years it has been his business to locate silk mills in Pennsylvania and in the New England States, but that in the future his activities will be confined to the South.

Building 100 Dwellings for Operatives.

The Fiske-Carter Construction Company, Greenville, S. C., advises the MANUFACTURERS RECORD that it has contract to build 100 frame operatives' houses at Alabama City, Ala., for the Dwight Manufacturing Company, which operates the Alabama Mills there. Of the total, there will be 20 five-room, 65 four-room and 15 three-room dwellings. Plans for the houses have been furnished by the owners and the operation will be handled entirely by the Fiske-Carter Company without awarding sub-contracts.

Contract for Mill Buildings.

Reported last week to erect a dye house, the Golden Belt Manufacturing Company of Durham, N. C., advises the MANUFACTURERS RECORD that contract for its new buildings has been awarded to Potter & Shackelford of Greenville, S. C., who will purchase building materials. Equipment orders have already been placed by the company.

Aiding to Popularize Cotton Goods.

The cotton industry's innovation, the traveling style show of the National Association of Cotton Manufacturers, was in Minneapolis for the week of Feb. 28. Thousands of men and women have shown an interest in the exhibit in this town; it is the first of its kind in the industry.

Following special appearances at meetings of dress fabric buyers' associations in New York in January, the exhibit went to Newark for a week and was in Philadelphia and Pittsburgh for the next two weeks.

Merchants and manufacturers, designers of frocks—those who prepare the dress patterns popular with women who choose to do their own sewing or have special dresses made for them—are co-operating in this venture to bring the beauty of cotton fabrics to the attention of women and to make easy the selection of individualistic patterns. These patterns are available to women desiring to duplicate any of the dresses shown.

The exhibitors are: Aberfoyle Manufacturing Co., Chester, Pa.; Pacific Mills, with factories at Columbia and Lyman, S. C.; Lawrence, Mass., and Dover, N. H.; Lorraine Mfg. Co., Pawtucket, R. I.; Boston Mfg. Co., Waltham, Mass.; Boot Mills, Lowell, Mass.; Lancaster Mills, Clinton, Mass.; Nashua Mfg. Co., Nashua, N. H.; Peperell Mfg. Co., Biddeford, Me., and Opelika, Ala.

GOOD ROADS AND STREETS

68 Miles to Cost Over \$1,000,000.

Frankfort, Ky.—A tabulation of bids by the State Highway Commission indicates that the construction cost of approximately 68 miles of highway, for which proposals were recently received, will aggregate more than \$1,000,000. Low bids for various projects were presented by Yewell & Ellis and W. F. Robinson & Son, both of Owensboro, Ky.; Corum Brothers, Madisonville, Ky.; H. Latta Smith, Sturgis, Ky.; Ben W. Gorham Company and Price, Lynch & Boggs, both of Lexington, Ky.

A Salesmen's Display Room on Wheels.

For the purpose of acquainting jobbers' salesmen with the operation of tools made by the Black & Decker Manufacturing Company, Towson, Md., a motor coach has been fitted with a special compartment cabinet to hold every product of the company; it is now touring the country. The coach travels on an itinerary according to prearranged engagements with jobbers who sell the company's line.

Three men travel with the coach, one being a driver, whose sole duty is to operate the coach and keep it in condition. A representative of the advertising department travels with the coach and puts in store and window displays, while the third man conducts the demonstration.

The coach is of the low intercity type, and the frame just back of the rear axle is dropped about 14 inches to provide a demonstrating compartment in which there is full head room. Across the rear of this compartment is a walnut buffet, made up with various size drawers, and these carry all the products. Large tools are bolted to the top of the buffet cabinet and to the work bench, which is provided with a vise. A large trunk is placed on the rear for carrying store and window display materials. A light canvas cover is available for covering the coach when garage space cannot be obtained.

Since all of the tools are electrically operated, a complete self-contained gasoline-electric generating unit has been mounted in a compartment at one side of the driver's seat; it supplies 110-volt current. An illuminated sign on the rear bears the Black & Decker hexagonal trade-mark.

The coach is finished in two tones of gray, with orange-vermillion wheels, and from the rear looks very much like a Pullman observation car. The inside is finished in gray leather, with walnut trimming. In addition to the driver's seat, there are eight large wicker chairs, with air cushions and trimming of gray leather. Additional refinements include match-holders, brass cuspids, electric fans, ice cooler, etc.

Second Chesapeake Bay Bridge Contemplated.

A group of Baltimore promoters, with J. G. Lee acting as general attorney, is planning to build a combination bridge and tunnel across the Chesapeake Bay from Sandy Point, on the west shore, near Annapolis, to Kent Island and then on to the mainland of the eastern shore. The entire distance will be less than four miles. In order to do away with the necessity of having a drawbridge it is planned that a tunnel starting 2500 feet from Sandy Point and extending for 4600 feet will be used. This tunnel is to have graduated inclines of 6 per cent grade, measuring 1200 feet on each end, thus making the level length of the tunnel 1500 feet, to be 45 feet under water, which allows space for the ship channel. It is to be connected with a bridge which will cover the remaining distance to Kent Island. From the Eastern shore of Kent Island to the mainland a bridge with a draw-span is also to be erected.

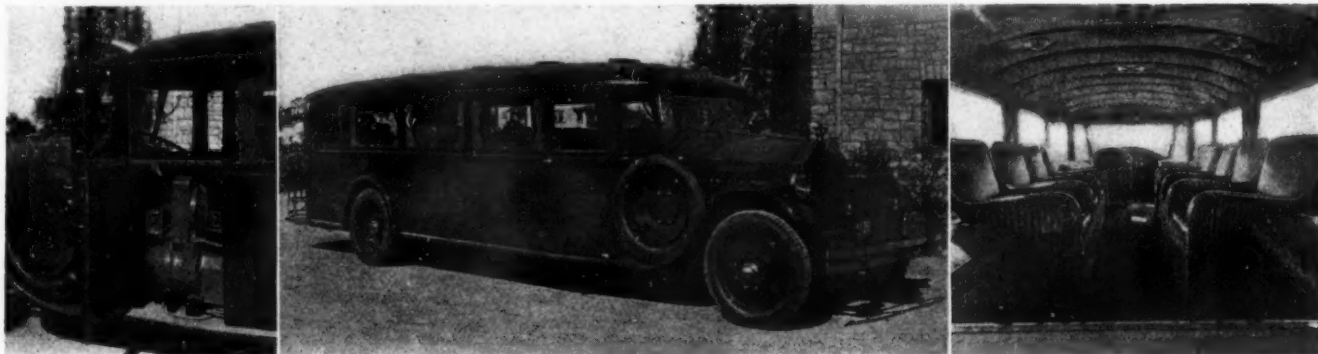
The tunnel itself would be 32 feet in diameter, having 20-foot clear roadway, being a double roadway for simultaneous traffic in both directions. It is to be built of reinforced concrete. The bridge to which it will connect will also be of concrete and will be 20 feet wide clear roadway. On the eastern shore this bridge will connect with the new proposed highway to Queen Anne, Md. It is estimated that the proposed bridge and tunnel will cost around \$10,000,000. P. Y. K. Howat, 1041 St. Paul street, Baltimore, and P. K. Schuyler, Willard Building, Washington, are the engineers and designers.

This project is the second to be announced recently for the construction of a bridge across Chesapeake Bay, the first having been projected by the Chesapeake Bay Bridge Company, Inc., which plans a \$10,000,000 structure from a point between Bay Shore and Back River, on the west shore, to a point between Rock Hall and Tolchester Beach, on the east shore.

\$190,000 Bonds Sold—Bids for Road Work.

New Smyrna, Fla.—Bonds in the amount of \$190,000 voted by Turnbull road and bridge district for the improvement of roads have been sold by the County Commissioners to the State Bank and Trust Company of New Smyrna. Bids for the proposed work will be received at a meeting of the Commissioners on March 10.

Edgecombe county, John A. Weddell, auditor, Tarboro, N. C., has sold a bond issue of \$300,000 for the construction of roads to A. B. Leach & Co., New York.



A COMPLETE ELECTRIC-GENERATING UNIT SUPPLIES POWER FOR OPERATING TOOLS DEMONSTRATED TO JOBBERS' SALESMEN, WHO ARE GIVEN COMFORTABLE SEATS IN THIS SPACIOUS COACH.

Bids to Be Opened on Mississippi Road.

Philadelphia, Miss.—Bids will be opened on March 15 in this city by the Mississippi State Highway Department, Jackson, for the construction of 18 miles of road to extend from Philadelphia to the Neshoba county line toward Meridian. Work will consist of grading and draining and the construction of a few small bridges at an estimated cost of \$150,000.

Traveling Exhibit of Plumbing Fixtures.

To offer a ready opportunity for the general public to see the newest home conveniences the Crane Company, Chicago, is operating four traveling exhibits. The service brings direct to the dealer and his customers a group of typical plumbing fixtures, storage-water heaters and water systems for suburban and farm houses; it was inaugurated in 1925. Since then three additional exhibits have been placed on the road.

Housed in a specially built body on a White chassis is a varied and interesting display of the latest designs in bathroom, kitchen and laundry equipment. A built-in bathtub complete with overhead shower and silk curtain is installed. An attractive combination kitchen sink and laundry tray is displayed, and two different types of water heaters, one of which burns gas and the other kerosene. Another interesting unit is an automatic water system for use on farms and in suburban houses. Three types of lavatories, a wide variety of valves and faucets, and plumbing and heating accessories are shown. Additional interest is given this exhibit through the fact that the supply fixtures are connected to running water. The pump of the water system is operated by electric current from the batteries of the car.

Traveling over regular circuits, the appearance of the exhibits in any town is announced in advance in the local papers. To September, 1926, approximately 890,000 people had examined the exhibits, 25 States and 985 towns having been visited.

Among the advantages of this service the company points out the following: "The most important thing accomplished is the bringing about of a closer tie-up with local dealers; but, in addition to this, home owners and prospective home owners reluctant to journey far to visit the permanent exhibit rooms find opportunity to benefit from the traveling displays in their vicinity. As a further evidence of interest shown, more than 50 per cent of the plumbers also advertise the exhibit."

\$10,000,000 Loan for Cuban Highways Negotiated.

The Chase National Bank of New York city has negotiated a loan of \$10,000,000 to the Cuban Government for paving work. Under an agreement signed February 19 the Chase bank will acquire by assignment from contractors engaged in the construction of the Central Highway deferred payment work certificates up to \$10,000,000. These certificates are to bear interest at the rate of 6 per cent a year, and are to be payable by the Republic of Cuba in the fiscal year ending June 30, 1931, and have a first preferential right to 90 per cent of the revenues to be derived in that year and in subsequent fiscal years from the taxes established by the public works law of Cuba until paid.

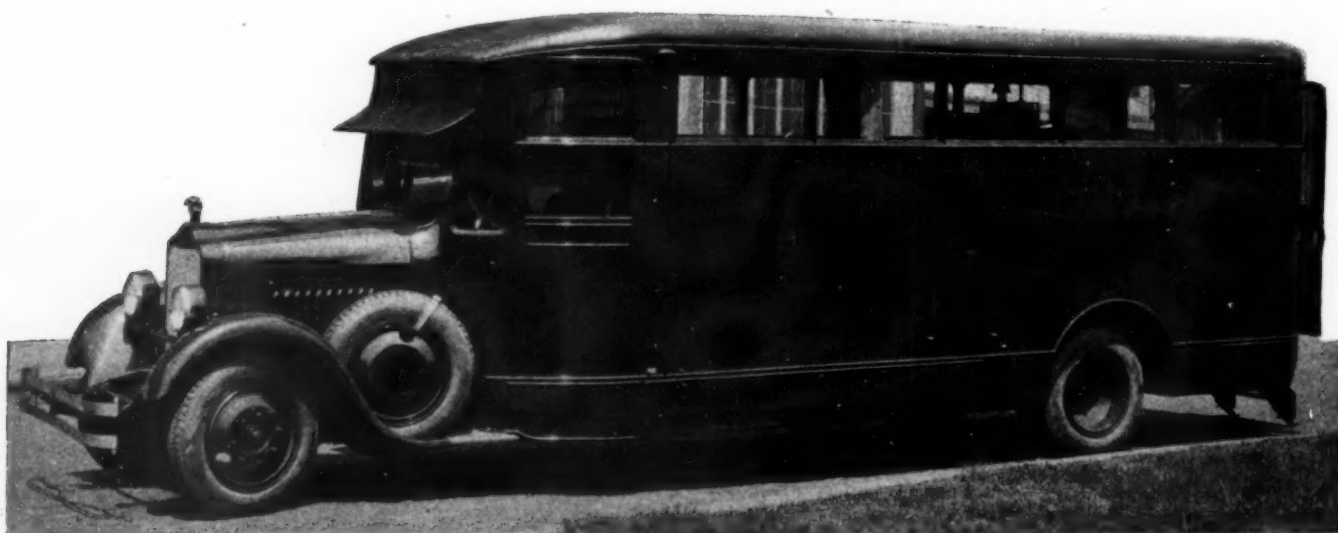
Asks Bids on 50 Miles Coastal Highway.

Columbia, S. C.—Sealed bids will be opened on March 10 at the offices of the State Highway Department, this city, for the construction of one bridge and five road projects on the Mid-Coastal Highway, the latter to cover approximately 50 miles. Road work will include 8 miles of clearing and grubbing in Charleston county; 6.68 miles of shaping gravel and sub-base and constructing concrete or asphalt shoulders in the same county, about 15, and three sections of approximately 15 miles, 10.85 and 9.63 miles in Berkeley county. The bridge project covers a reinforced concrete structure of five 22-foot spans in Charleston county. Plans may be obtained from the State Highway Engineer, Columbia.

Martin County Votes \$1,772,000 of Bonds.

Stuart, Fla.—Bonds in the amount of \$1,772,000 have been voted by Martin county to complete a comprehensive road-building program, started last year with a \$1,000,000 issue. The program includes roads to the St. Lucie Inlet on both sides, completion of the Gaines Highway to Lake Okeechobee, completion of the Martin Highway to the Okeechobee county line and other projects.

Proposals will be received until March 15 by the Louisiana Highway Commission, Baton Rouge, for repairs to the Bayou Vidol bridge on the Tallulah-St. Joseph Highway in Madison and Tensas parishes, the work to consist of removal of south abutment, raising south concrete girder span to proper elevation and reconstructing south abutment.



TO SHOW THE DEVELOPMENT OF HOME CONVENIENCES—PLUMBING AND HEATING—FOUR TRUCKS LIKE THE ABOVE TRAVEL EVERY SECTION OF THE COUNTRY.

LUMBER AND BUILDING MATERIALS

Lumber Industry Shows Small Gain.

Washington, February 24.—Telegraphic reports to the National Lumber Manufacturers Association here today from 304 of the larger commercial softwood lumber mills of the country for the week ending February 19 (allowing for a smaller number of reporting mills) indicate that order files were about the same as for the week before, with a considerable gain in shipments and a slight increase in production. In comparison with reports for the same period last year, there has been a pronounced falling off in shipments and new business and some decrease in production.

The 120 hardwood operations reporting this week, when compared with reports from 136 mills last week, reveal some increase in production and little change in shipments and new business. As compared with last year, production and new business seem to be slightly larger, with shipments a little less.

The unfilled orders of 189 Southern Pine and West Coast mills at the end of last week amounted to 492,401,973 feet, as against 489,625,610 feet for 190 mills the previous week. The 117 identical Southern Pine mills in the group showed unfilled orders of 223,367,051 feet last week, as against 216,663,333 feet for the week before. For the 72 West Coast mills the unfilled orders were 269,034,922 feet, as against 272,962,277 feet for 73 mills a week earlier.

Altogether the 295 comparably reporting softwood mills had shipments 99 per cent and orders 98 per cent of actual production. For the Southern Pine mills these percentages were, respectively, 86 and 97, and for the West Coast mills 95 and 93.

Of the reporting mills the 273, with an established normal production for the week of 182,857,854 feet, gave actual production 92 per cent, shipments 91 per cent and orders 91 per cent thereof.

The Southern Pine Association reports from New Orleans that for 117 mills reporting shipments were 13.57 per cent below production and orders 2.97 per cent below production and 12.27 per cent above shipments. New business taken during the week amounted to 61,353,593 feet, shipments 1,879,435 feet and production 63,233,028 feet. The normal production of these mills is 73,866,810 feet. Of the 115 mills reporting running time, 82 operated full time, 15 of the latter overtime; 5 mills were shut down, and the rest operated from two to five and one-half days.

The North Carolina Pine Association of Norfolk, Va., with eight more mills reporting, shows production about the same, more than 100 per cent increase in shipments and new business well in advance of that reported for the preceding week.

The Hardwood Manufacturers Institute of Memphis, Tenn., reported from 106 units a nominal decrease in production and marked decreases in shipments and new business. The normal production of these units is 17,808,000 feet.

Hardwood for Newsprint by New Process.

A new wood-pulping process which produces a high yield of pulp for cheap print paper from hardwoods has been developed at the Forest Products Laboratory at Madison, Wis., according to the Forest Service, United States Department of Agriculture. The new process holds promise of transferring the burden of newsprint manufacture from the spruce forests of the North to the hardwoods of the North, the East and the South. Through the use of a rod mill, a rotating, hollow, horizontal steel cylinder, half filled with steel or bronze rods, hardwood chips are reduced to fiber.

The substitution of the rod mill for a certain amount of

chemical treatment conserves fiber destroyed by the chemicals, the Forest Service points out. The distinctive feature of the new, or semi-chemical, process is that only a mild chemical treatment is used before the chips are reduced to the proper pulp consistency in a rod mill.

Paper of the weight and thickness of newsprint made wholly from semi-chemical pulp of black, tupelo or red gum, or aspen, birch or maple, was found to have a greater strength than the present commercial newsprint. In the case of gums, the department indicates that, provided black and red heartwood have been excluded, the color of the paper can be made to equal or excel that of standard newsprint.

Pulp made by this new process from aspen and birch can be substituted for over 50 per cent of the standard newsprint mixture of ground wood and sulphite pulp without sacrifice of quality. In fact, the Forest Service points out that ground wood pulp and the new semi-chemical pulp can be combined without sulphite pulp, although the sheet made without sulphite is rather weak when wet and requires care in handling on the wet end of the paper machine.

The introduction of semi-chemical pulp from aspen and birch and possibly maple should assist materially in continuing the newsprint supply in the Northern and Northeastern regions. The supply of gum in the Southern States offers an excellent opportunity for the development of a print paper in a region which has hitherto been excluded from serious consideration for the purpose because of lack of spruce and hemlock for ground wood and for sulphite pulp.

North Carolina Farmers Planting Black Walnut Trees.

Farmers of Catawba County, North Carolina, have been studying the uses to which waste lands on their farms may be put, and as a result some of them are planting black walnut trees. "The first farmer to begin this new project is John W. Robinson, who has recently planted six acres of land to black walnuts," reports R. W. Graeber, extension forester at the State College. Mr. Robinson used some river-bottom land not suitable for crop cultivation. He selected a good strain of walnut, having a high cracking quality in the nuts as well as good timber value.

There are many acres of land in various sections of North Carolina which are not suitable for cultivated crops. A number of farmers are turning such lands back into timber in order to establish good farm woodlots.

The possibilities of growing black walnut timber in the bottom lands of the Piedmont section and in the northern coves and slopes of the mountain section are good. Black walnut will prove one of the best possible money crops on many acres of waste land, says Mr. Graeber.

Late reports from the United States Department of Agriculture indicate that black walnut timber is much in demand and that it sells for a high price, especially when the timber is of the size suitable for veneering.

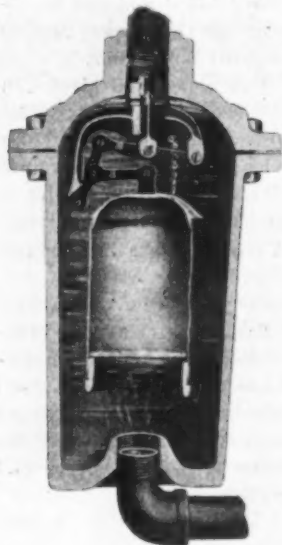
Officers for National Builders' Exchanges.

Washington, D. C.—At the sixteenth annual convention of the National Association of Builders' Exchanges, held at the Raleigh Hotel here last week, Robert L. Reisinger of Milwaukee was elected president. Other officers elected were W. H. George, San Francisco, first vice-president; Samuel Hotchkiss, St. Joseph, Mo., second vice-president; W. A. Sharp, Reading, Pa., third vice-president; C. Ed de Brauwere, Miami, Fla., fourth vice-president, and Max Baumann, New York city, re-elected treasurer.

MECHANICAL

Improved Steam Trap.

Keeping steam lines free from air and condensation water is a problem which requires a high degree of specialization, in the opinion of the Armstrong Machine Works of Three Rivers, Mich., who have concentrated exclusively on the manufacture of steam traps for many years, and one of their products is shown in the accompanying illustration.



HOW THE TRAP WORKS.

As soon, however, as the inlet admits water, condensation causes the bucket to fill and it sinks, opening the discharge valve until the water is cleared and live steam flows into the intake once more. Since the top of the bucket is provided with a vent, air discharged into the bucket will not airlock the trap, but escapes through the vent to the top of the trap where it is discharged.

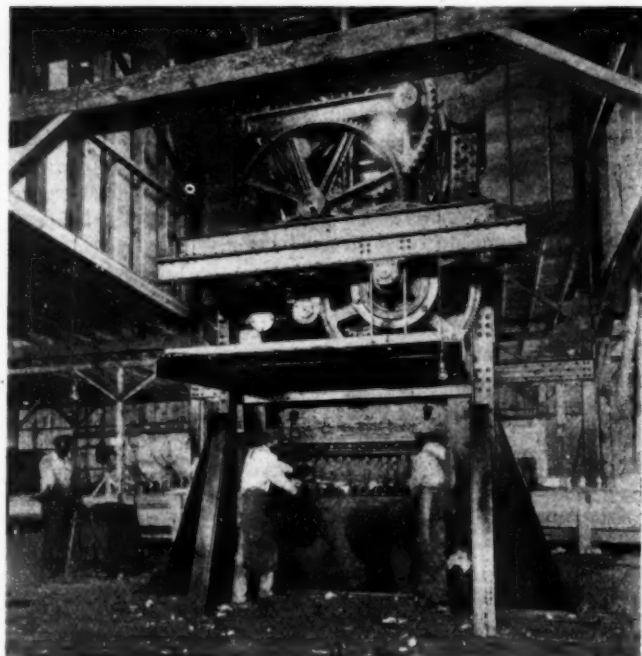
The advantages claimed for the Armstrong principle are that the valve action is so certain and rapid that valve opening and closing are absolutely positive, preventing valve scoring and wire drawing or the constant loss of live steam. The trap is practically self-scrubbing due to the top discharge, since oil, grease and air tend to accumulate next to the discharge valve. The positive valve action also induces such high velocities in the discharge that sediment is kept stirred up and carried away.

Electric or Diesel Drive Cotton Press.

In the picture herewith is shown a directly connected electric motor-driven cotton compress installation made at Jackson, Tenn., with the Public Compress Company by the Economy Baler Company of Ann Arbor, Mich. It is claimed that there are many advantages in using these cotton compresses as compared with the old-style machines; that the electric drive or the Diesel-engine-drive cotton compress will not only cut fuel cost per bale nearly 90 per cent, but it will reduce insurance cost of the entire warehouse, including the cotton therein, especially when a directly connected electric motor-driven outfit is used. The labor cost is cut by eliminating the fireman required for steam compresses, as well as two tie men, etc.

It is further remarked that, considering the cost of installation as well as the original cost of the compress outfit, the initial cost of one of these electric or Diesel-engine-driven cotton compresses of this make represent

a saving of approximately 50 per cent as compared with the old steam compress. Besides, one of these compresses can be started almost instantly without delay such as would be caused by being obliged to fire up before begin-



NEW COTTON COMPRESS IN OPERATION.

ning work; it can also be stopped with equal quickness, and it thus enables a warehouseman to give better service.

In its general design the Economy geared toggle cotton compress is very similar to the steam toggle compress, but it does away with the large steam cylinder located on top of the press, and instead of it uses two pairs of bull gears with pitman connections to raise the toggles and the platen in compressing the bale. As the top bull gears revolve, the long toggle arms are pulled up over the large fulcrum-casting connected to the frame of the press. Then, as the top ends of the long toggle arms are pulled up and in toward the fulcrum point, the pitmans are revolving over the dead center of the powerful bull gears. This gives a simple and powerful double toggle movement, ample to compress the heaviest bales to the required density. This compress is built entirely of cast steel; there is no cast or gray-iron "semi-steel" used in it. It has a capacity of 125 bales per hour.

Asphalt Association Elects Officers—1927 Program Outlined.

At the recent annual meeting of the Asphalt Association, held in Chicago during the convention period of the American Road Builders' Association, Joe S. Helm of New York was elected president. Other officers were elected as follows: Leroy M. Law, New Orleans, vice-president; Herbert Spencer, treasurer, and J. E. Pennybacker, secretary-manager, both of New York.

Under a program for 1927 submitted by the executive committee and adopted by the board of directors, the Asphalt Association will expand its mechanical activities and will advocate open competitive specifications for various types of asphalt pavement adapted to meet all reasonable paving needs. The association will develop and publish a master specification for asphalt for all types of construction without reference to sources of origin. Headquarters of the Association are at 441 Lexington avenue, New York.

CONSTRUCTION DEPARTMENT

EXPLANATORY

Additional information is published about all enterprises mentioned in this department as soon as such data can be obtained.

An asterisk (*) following an item indicates that the enterprise has been reported in a preceding issue.

DAILY BULLETIN

The Daily Bulletin is published every business day to enable its subscribers to follow up promptly the industrial, commercial, railroad, financial, building and general business development of the South and Southwest. To machinery manufacturers and dealers, contractors, engineers, and others who require daily information of every new enterprise organized and details about important additions to enterprises already established, the Daily Bulletin is invaluable. Subscription price, \$30.00 a year.

Bridges, Culverts and Viaducts

Proposed Construction

Florida—State Road Dept. will build 3 bridges. See Roads, Streets, Paving.

Fla., Miami—City Comm., J. W. Watson, Jr., City Atty., plans bridge across Miami River at N. Seventeenth St.

Fla., Miami—Dade County Commrs., Geo. F. Holly, Clk., received low bids for Seventy-ninth St. (Everglades Ave.) causeway across Biscayne Bay, connecting Miami and Miami Beach; P. J. Davis Construction Co., 834 N. Miami Ave., lowest combined bid for Cont. No. 1; Lehigh Structural Steel Co., Realty Board Bldg., Miami, for Cont. No. 2; Waldeck Deal Dredging Co., 832 N. W. 12th Court, Cont. No. 5, all Miami; Nashville Bridge Co., Ft. Shelby Ave., Nashville, Cont. No. 3; total cost \$580,703; Hobart Crabtree, Civil Engr. and Surveyor, P. O. Box 622.*

Fla., Punta Gorda—State Road Dept., Dr. Foss A. Hathaway, Chmn., plans concrete bridge across Punta Gorda Bay; cost over \$1,000,000.

Fla., Stuart—City will receive bids for 3 steel I-beam bridges with concrete abutments and floor slabs: 30-ft. span on Belle Flora Ave.; 30-ft. span, Pinewood St.; two 25-ft. spans, Ave. B; Butler, Barnett & Taylor, Engrs., Citizens Bank Bldg., West Palm Beach.

Fla., Tampa—Tampa Subway Corp., N. W. Green, Sec., 723 Stovall Professional Bldg., plans toll bridge and vehicular tunnel, 1,500,000 cu. yd. dredging and hydraulic fill; 4 mi. reinforced concrete bridge; 110-ft. slab double leaf bascule bridge; 2500 lin. ft. reinforced concrete vehicular tunnel under ship channel in Hillsboro Bay; about 189,000 cu. yd. concrete; 6800 tons reinforcing; 100,000 lin. ft. pine piling. See Want Section—Bids Asked.

Fla., Thonotosassa—Atlantic Coast Line R. R., J. E. Willoughby, Ch. Engr., Wilmington, N. C., plans bridge over Hillsborough River, near Thonotosassa.

Ga., Ludowici—State Highway Dept., East Point, will let contract in Nov. for 1½ to 2 mi. concrete bridge across Altamaha River at Doctortown; total cost about \$800,000.*

Kentucky—State Highway Dept., Frankfort, received low bids for 3 roads: Gerrard-Jessamine Counties, steel-span concrete bridge over Kentucky River, Lancaster-Nicholasville road, at Camp Nelson, A. M. Cook & Co., Warburg, Tenn., \$66,725; Christian and Fulton Counties, two overhead bridges, eliminating railroad crossings: On Hopkinsville-Guthrie road, Alexander Brothers, Cadiz, \$15,656; on Fulton-Clinton road, Landrum Brothers & Ewell, Dyer, Tenn., \$12,667.*

Kv., Lawrenceburg—Tyrone Bridge Co., capital \$10,000, incorporated; Stanley Trent, J. E. Gilbert; plans constructing and maintaining bridge across Kentucky River, between Anderson and Woodford Counties.

La., Gretna—Jefferson Parish Police Jury, Wm. Hepting, Sec., receives bids Mar. 16 for creosoted, and steel beam bridge over Seventeenth St. canal; estimated cost \$12,000; plans from Maj. Frank T. Payne, Consulting Engr., Jefferson Bank Bldg.

La., New Orleans—Public Belt Comm., accepted plans and specifications for New Orleans Public Belt R. R., A. F. Barclay, Ch. Engr., combination railroad and auto bridge over Mississippi River, estimated total cost \$14,026,991; Ralph Modjeski, Chief and Supvz. Engr., and Chmn. Board of Advisory Engrs., 28 E. Jackson Blvd., Chicago, Ill., advised: Four years will be required to complete work.*

Md., Baltimore—Chesapeake Tunnel and

Bridge Co., John L. G. Lee, Atty., Calvert Bldg., plans \$10,000,000 combined bridge and tunnel: Bridge from Kent Island, Eastern Shore, on point about 4000 ft. off shore from Sandy Point; 4000 ft. between western bridgehead and shore will be 18-ft. double roadway tunnel. Lately noted Clarence S. Soper, 3 E. Lexington St., interested.

Md., Salisbury—State Roads Comm., Baltimore, receives bids Mar. 8 for 2 bascule piers, comprising substructure for bascule bridge over Wicomico River at Main St., Salisbury, Wicomico County, Wt-37; J. H. Mackall, Chmn.; L. H. Stuart, Sec.*

Mo., St. Louis—Board of Public Service receives bids March 8 for reinforced concrete bridge on Watson Road over River des Peres; plans on file.

N. C., Charlotte—City Comm., W. S. Stancill, Commr. of Public Works, approved plans for reconstructing overhead bridge across Seaboard Ry. tracks on Beatty's Ford road; creosoted timber, 50-ft. wide.

N. C., Greensboro—City reported receives bids about Mar. 22 for 12 concrete and steel underpasses, to eliminate grade crossing; street paving, etc.; cost \$1,000,000; O. S. Payzant, Engr.

N. C., Lexington—Davidson and Davie Counties Commrs. plan concrete double track toll bridge across Yadkin River, Highway No. 75, between two counties, connecting Mocksville, Davie County, and Lexington, Davidson County.

N. C., Wilmington—State Highway Comm., Raleigh, plans expending about \$1,250,000 for 2 bridges and road improvements: Over Cape Fear River, in harbor where river is divided into Cape Fear and Northeast branches; over Northeast River above terminals; ¼ mi. improved road along west bank Point Peter, in harbor, connects 2 bridges; construction awaiting legislative authorization.*

Tenn., Memphis—City, Rowlette Paine, Mayor, plans \$300,000 reinforced concrete and steel viaduct.

Tex., Rankin—Kansas City, Mexico and Orient Ry. Co., H. E. Beard, Ch. Engr.; Upton County, W. M. Davis, County Atty., plan timber, steel and concrete toll bridge across Pecos River, about 20 mi. from McCamey, on Yates Ranch Crossing; approximate cost \$75,000.

Tex., San Antonio—City, John W. Tobin, Mayor, receives bids Mar. 14 for steel and reinforced concrete bridge over San Antonio River on Pecan St.; 80 ft. long, 55 ft. wide; estimated cost \$35,000; I. Ewert, City Engr.*

Virginia—State Highway Comm. receives bids for 2 bridges. See Roads, Streets, Paving.

W. Va., Huntington—City Commrs., Homer Yeich, Commrs. of Streets and Sewers, plan bridge over Guyan River, Robey Hollow, 90-ft. span at each end, 125-ft. span in middle; estimated cost \$60,000; Robert J. Coffin, Asst. City Engr.

Contracts Awarded

Fla., Green Cove Springs—Fred T. Ley & Co., Vail Arcade, Miami, has contract for 10,000-ft. Shands bridge over St. Johns River, Green Cove Springs, about 30 mi. from Jacksonville; 20-ft. roadway, creosoted pile trestle, timber floor of laminated construction, except 100-ft. single-leaf Strauss bascule span over navigation channel.

Tex., Denton—City, B. W. McKenzie, Mayor, let contract to Chas. N. Davis, Denton, at \$22,754 for 16 reinforced concrete bridges, multiple span culverts, etc.*

Tex., Rio Hondo—Cameron County, Oscar C. Dancy, County Judge, let contract to Dodds & Wedegartner, San Benito, at \$12,053 for steel bridge over Arroyo Colorado,

Rio Hondo, on Harlingen-Rio Hondo road near Brownsville.

W. Va., Hamlin—La Lance Equipment Co., 713 Second Ave., Huntington, has contract for steel superstructures for 10 bridges in Lincoln County, total cost \$50,000.

Canning and Packing Plants

Ala., Decatur—Junior Chamber of Commerce reported approved plans for establishing canning plant.

Ark., Harrisburg—W. D. Ezzell, County Farm Agt., reported negotiating with outside capitalists for canning plant.

Ark., Van Buren—Best Clymer Co., 425 W. Davis St., St. Louis, Mo., reported install cold packing plant for strawberries.

Ga., Valdosta—Robins, Ltd., 200 Majestic Bldg., Detroit, Mich., reported, negotiating with outside capitalists for canning and preserving plant.

Tex., Donna—C. H. Dunn reported install canning plant; purchased equipment.

Clayworking Plants

Md., Frostburg—United States Refractories Corp., Mount Union, Pa., reported acquired Savage Mountain Fire Brick Co.'s plant; will maintain company as subsidiary.

Miss., Yazoo City—Chamber of Commerce reported interested in establishment of brick plant by outside capitalists.

Mo., Mexico—A. P. Green Fire Brick Co. may add number of new units.

Tex., Brownwood—B. E. LaDow, Fredonia, Kansas, reported interested in establishing face brick plant, capacity 100,000 bricks; cost \$250,000.

W. Va., Newell—The Austin Co., 16112 Euclid St., Cleveland, Ohio, has contract for Plant No. 7 for the Homer Laughlin China Co.*

Coal Mines and Coke Ovens

Va., Toms Creek—Virginia Iron, Coal and Coke Co., Roanoke, reported, plans expending \$300,000 to modernize Sexton Mine; improvements include tippie, 4000 tons daily capacity; rotary pump, aerial tramway, shaker screen, steel rails for all lines inside mines, new locomotive, standard cars and mining machinery, increasing capacity from 1600 to 4000 tons daily. Company wires: "Report premature as no such expenditure has yet been authorized."

Concrete and Cement Plants

Miss., Jackson—Faulkner Reinforced Concrete Pipe Co., L. E. Faulkner, Pres., Carter Bldg., Hattiesburg, reported establish \$50,000 plant, equip with modern machinery; manufacture concrete pipe of all dimensions; has similar plants in Mobile, Ala., and Hattiesburg.*

S. C., Columbia—Superior Sewer Pipe Co., C. R. Johnson, Pres., Camp Sevier, Greenville, reported, plans erecting plant, manufacture concrete sewer pipe, 4 to 48-in.

Tex., Palacios—Gulf Coast Shell and Cement Co., J. E. Reed, 2617 Caroline St., Houston, reported, assembling equipment for shell handling plant; estimated cost \$150,000; plans constructing cement manufacturing plant in Gulf Coast region adjacent to shell banks; construct 18 barges, clean out channel into Palacios connecting with railroad, install loading machinery to handle 1000 yds. daily; deepen channel into Collegeport harbor, connecting with railroad, building harbor and turning basin and loading equipment, to handle 1000 yds. shell daily.*

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Tenn., Knoxville—Volunteer Portland Cement Co., capital \$1,250,000, incorporated under laws of Delaware; J. Ross Hanahan, Pres., 21 Meeting St., Charleston, S. C.; Howell J. Davis, Vice-Pres., Kingston Park, Knoxville; other directors include: Weston M. Fulton and C. M. Moore; Major F. H. Lewis, Engr., Real Estate Trust Bldg., Philadelphia, Pa.; establish new cement plant, daily capacity 3000 bbls.; proposed site contains about 350 or 400 acres, adequate water supply and good railroad outlet.*

Cotton Compress and Gins

Ark., North Little Rock—Temple Gin Co., capital \$10,000, incorporated; A. A. Rice, 5222 F St.

Ga., Augusta—Georgia Storage & Compress Co., capital \$100,000, incorporated; I. S. Ferguson, Landon Thomas.

N. C., Rockfish—Gillis-Ray Co., capital \$10,000, incorporated; M. G. Ray, Rockfish.

Cottonseed-Oil Mills

Miss., Meridian—Lauderdale Oil Mills is remodeling building for cotton seed manufacturing, supervision of J. W. McNeil; plant will consist of 3 units, linter and separating department, seed and hull house; linter and separating building will be 2 story, brick and concrete, 90x90 ft.; seed house, steel and concrete, 160x60 ft.; hull house, steel and concrete, 50x90 ft.; steam driven; capacity 150 to 200 tons every 24 hrs.; install modern machinery; cost \$300,000.

Drainage, Dredging and Irrigation

Fla., Tampa—Dredging—See Bridges, Culverts, Viaducts.

S. C. North Augusta, mail Augusta, Ga.—City Council interested in plans for levee to protect property in or near N. Augusta from highwater of Savannah River.

Tex., Anahuac—Fresh Water League, Stewart R. Smith, Pres.; L. R. Miller, County Judge, Sec.-Treas.; interested in dam to keep out salt water and make possible reclaiming 100,000 acres, Chambers County.

Tex., Brownsville—Cameron County Water Improvement Dist. Comms. let contract to Trinity Farms Construction Co., Waxahachie, Tex., for flood work, including Arroyo Colorado floodway and North floodway, about 5,000,000 yds. excavation, levees, etc.; estimated cost \$620,000; W. O. Washington, County Engr.; Oscar C. Dancy, County Judge.*

Va., Norfolk—Norfolk County Comms., John G. Wallaett, Chmn., 622 Law Bldg., plans improvements in Sunray Drainage Dist. No. 2, consists of digging 10½ mi. drainage canals, 145,000 cu. yds. excavation, clearing 1 mi. right of way, 86 ft. wide; 14 concrete culverts at road intersections; receive bids Mch. 22; A. O. Lynch, Sec.

Electric Light and Power

Electric light and power work in connection with many LAND DEVELOPMENT operations involves the expenditure of large sums of money. See that classification for details.

Ala., Birmingham—Alabama Power Co. reported to extend transmission and distribution facilities in Birmingham mineral district; increase substation capacity by 15,000 to 20,000 h.p.

Ala., Birmingham—Alabama Power Co. reported, construct 110,000 volt transmission line; Martin dam to north, Auburn station on west, Martin dam and lock 18 on east, 48 miles long, H-frame, creosoted wood pole construction; 50,000 h.p. capacity.

Ala., Birmingham—Alabama Power Co. reported, let contract for generating equipment for Upper Tallapoosa development on Tallapoosa River; to I. P. Morris & Co., Richmond and Norris Sts., Philadelphia, Pa., for 2 reaction type hydraulic turbines of 25,000 h.p. each; to General Electric Co., Schenectady, N. Y., for two 25,000 h.p. generators.*

Fla., Avon Park—The W. S. Barstow Management Assoc., Inc., operating managers of Florida Public Service Co., 100 E. Central Ave., Orlando, advises regarding \$2,014,000 power plant: "No contracts have been placed for large pieces of apparatus; we do all of our construction work and installation of special pieces of apparatus will come under supervision of manufacturers, no additional construction plant equipment to be purchased."*

Georgia—Georgia Power Co., Atlanta, granted charter, with H. M. Atkinson, Chmn.

of Board; P. S. Arkwright, Pres.; W. H. Wright, Sec., all of Atlanta; company is consolidation of 6 Georgia public utility companies; will supply service to about 150 Georgia cities and towns; \$10,000,000 of new capital will be required each year for improvements and expansions of company's services.*

Ky., Louisville—U. S. Engineers' office receives bids March 22 for power plant equipment. See Want Section—Bids Asked.

Louisiana—Subsidiaries of American Utilities Co., Philadelphia, are reported to be acquiring electric and power properties in Buna, Joaquin and Newton, Texas; Logansport, Pleasant Hill and Zwolle, La.; also electric light and power and ice property in Many and properties supplying ice in Mansfield, South Mansfield and Naborton, La.

Md., Vienna—Eastern Shore Gas & Electric Co., Salisbury, under management of General Engineering & Management Corp., 165 Broadway, New York, advises: "Have purchased site and also right of way for transmission lines but have as yet let no contract for construction of plant; expect to start operations early part of March."*

Missouri—A. B. Leach & Co., Inc., Federal Securities Corp., Pearsons-Taft Co., Henry L. Doherty & Co., all St. Louis, are offering \$15,000,000 refunding 5% gold debenture bonds of Cities Service Co.; company operates public utilities in Oklahoma, Missouri and elsewhere.

North Carolina—Phoenix Utility Co., 71 Broadway, New York, advises that Parker, Graham, Sexton, Inc., 5 Colt St., Paterson, N. J., have contract for tunnel to be built in connection with Waterville hydro-electric development on Pigeon River for Carolina Power & Light Co., Raleigh.*

N. C., Shelby—Shelby Electric Co., George Tompkins, Mgr., reported has contract for electric line in Elizabeth section.

Oklahoma—Hill, Joiner & Co., Inc., Kelley, Drayton & Converse, Halsey, Stuart & Co., Inc., all New York, Emery, Peck & Rockwood, offering \$6,500,000 first mortgage 5% gold bonds, Series A, of Southwestern Light & Power Co., 72 W. Adams St., Chicago, Ill., supplying electric light and power to 53 communities and gas to seven and ice to nine communities.

Oklahoma—Middle West Utilities Co., 72 W. Adams St., Chicago, Ill., votes Mar. 29 on proposed increase in authorized prior lien and preferred stocks by \$20,000,000 and an issue of 500,000 shares new no par lien and preferred.

Okl., Tulsa—T. C. Hughes, 422½ S. Boston St., of Hughes Engineering Co., Walter E. Eastman, Fairfax, and others, reported interested in constructing \$2,000,000 power plant on Arkansas River; plans include diversion dam at Kaw City, from there a canal 10 miles long and tunnel 2½ miles long will be dug to Fairfax; 2 miles north a reservoir will be built; generate between 20,000 and 30,000 h.p.

South Carolina—General Gas & Electric Corp., 50 Pine St., New York, plans hydro-electric development on Saluda River 10 miles west of Columbia, involving initial expenditure of \$20,000,000; more than 50,000 acres of land will be utilized in developing annual output of over 300,000,000 kwh.; dam will be more than 8000 ft. long, 188 ft. high, containing 11,000,000 cu. yds.; lake created will be over 30 miles long, with average width of nearly 3 miles; actual capacity of machinery to be installed at power house will be over 200,000 h.p.; Murray & Flood, Grand Central Terminal, New York, will be supervising engineers; the W. S. Barstow Management Asso., Inc., 50 Pine St., New York, will do construction work; General Gas & Electric Corp. will control Saluda development through Lexington Water Power Co.; greater portion of power to be generated at this development will be sold to Broad River Power Co.

S. C., Charleston—South Carolina Power Co. offering cumulative preferred stock, par value \$100; company constructing 10,000 kw. additional generating plant; considering plans for inter-connection through construction of high tension transmission lines of property of South Carolina Power Co. with other properties in Georgia, controlled by Southeastern Power & Light Co.*

S. C., Sumter—Carolina Power & Light Co., Raleigh, N. C., constructing 100,000 volt, 6000 kv-a distribution station; design and construction by company; materials and supplies ordered.*

Tenn., Chattanooga—Tennessee Electric Power Co. reported extend power line as continuation of present 2300 volt line to South Harman.

Tenn., Elizabethton—City installing white way system in business district; Bristol Gas

& Electric Co. and Watauga Power Co. are purchasing materials.

Tenn., Ridgely—Union Electric & Gas Co., reported, acquired municipal electric and water plant at Ridgely and electric plant at Tiptonville; properties will be owned by Southern Utilities Co., a subsidiary of Union Electric & Gas Co., under management of Gannett, Seelye & Fleming, Inc., New York, Harrisburg and New Orleans.

Tex., Amarillo—Southwestern Public Service Co., L. L. Ferree, Gen. Mgr., reported expend \$2,000,000 for improvements and extensions, not including power plant now under construction and to which second unit probably will be built.

Tex., Austin—Board of Regents, University of Texas, reported let following contracts for power plant: Construction of building to C. M. Bialowwski, 516 Denver St., Wichita Falls, at \$176,694; plumbing to Kirkwood & Wharton, 456 Main Ave., San Antonio; heating and piping to Fox-Schmidt, 415 W. Sixth St., Austin.*

Tex., Brownsville—Brownsville Chamber of Commerce reported interested in 40-mile white way from here to LaFeria.

Tex., Crowell—H. E. Ferguson, reported, interested in development of hydro-electric plant.

Tex., El Paso—El Paso Electric Co., Tom P. Walker, Mgr., reported plans expending over \$1,000,000 for improvements in 1927, including installation of 2 high pressure boilers, power house enlarged, coal handling equipment rearranged; increase plant capacity to take care of future requirements through completion of transformer.*

Tex., Estelline—Central Power and Light Co., Frost Nat. Bank Bldg., San Antonio, reported, considering erecting power plant; construct dam 1500 ft. wide and 175 ft. high; cost about \$1,000,000.

Tex., Fort Worth—City, C. A. Winder, Supervisor, Public Utilities, advises engineering department is preparing plans and specifications for installing white way system on Main and Houston Sts. between Weatherford and Front; 192 standards, with complete underground system of parkway cable, consisting of 4 circuits; intersection units will also carry traffic signals as well as police and fire alarm boxes; cost \$70,000.*

Tex., San Angelo—San Angelo Light & Power Co., will erect concrete, structural steel and brick addition, install 6250 kv-a unit; Sargent & Lundy, Engrs., 72 W. Adams St., Chicago, Ill.; construction by owners; machinery purchased.

Tex., San Angelo—West Texas Utilities Co., H. Hoppe, Supt., Abilene, reported build power plant addition; Sargent & Lundy, Engr., 1412 Edison Bldg., Chicago, Ill.

W. Va., Bluefield—Appalachian Electric Power Co., reported, expend \$3,500,000 during 1927 for equipment and lines; is constructing transmission line from Switchback, W. Va., through Saltville, Va., to Kingsport, Tenn., cost \$1,750,000; build substations at Saltville and Kingsport; constructing line through Switchback to Logan, W. Va.; installing new 35,000 h.p. generator at Glen Lynn, Va.; will build big substation at Glen Lynn.

W. Va., Martinsburg—Potomac Light & Power Co. reported plans improvements.

Flour, Feed and Meal Mills

Okl., Ponca City—Ponca City Milling Co. reported let following sub-contracts for \$50,000 mill and warehouse: Reinforcing steel to Capitol Steel & Iron Co., 815 S. Broadway; structural steel, Midwest Steel Co., First Nat. Bldg.; metal windows, Lumbermen's Supply Co., American Nat. Bldg.; metal doors and rolling steel doors to Bissell Builders Supply Co., Colcord Bldg., all Oklahoma City; C. M. Dunning Construction Co., 420½ W. Hudson St., Gen. Contrs.*

Tex., Floydada—L. A. Marshall reported rebuild \$25,000 grain elevator.

Tex., Fort Worth—Farmers' Grain Co. increased capital \$5000 to \$10,000.

Va., North Emporia—Slagle Milling Co., A. A. Slagle, Pres., will rebuild burned plant with daily output 50 bbls. flour and 50 bags meal; 32 x 45 ft., 4 stories, steel and wood, wood and cement floors, sheet iron roof; address construction proposals to A. A. Slagle.

Foundry and Machine Plants

Ark., Little Rock—Arkansas Foundry, 1500 E. Sixth St., plans addition; install equipment and machinery.

Ga., Columbus—Golden's Foundry & Machine Co. erect 5-story and basement, 60x68-ft. pattern storage room, reinforced concrete and brick, structural steel, tar and gravel

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roof, concrete floors, steel sash; J. E. Serrine & Co., Engrs., Greenville, S. C.

Mo., St. Louis—Parkin Laundry Machinery Co., capital \$25,000, incorporated; Blaine Perkin, 6239 Cates St.

Mo., St. Louis—See Miscellaneous Enterprises.

Tenn., Memphis—Mill Supplies, etc.—Reed & Duecker, 171 N. Main St., capital \$200,000, incorporated; C. C. Reed.

W. Va., Kenova—Champion Switch Co., J. F. Sinclair, Treas.-Mgr., Buffalo, N. Y., reported plans establishing factory; acquired property of Kenova Mine Car Co., consisting of 11 acres, giving Jeffrey-Sweatt Insulator Co. and Champion Switch Co., which are affiliated organizations, ownership of about 30 acres; will use for expansion of both plants; expend approximately \$400,000; manufacture high tension electrical equipment.

Gas and Oil Enterprises

Fla., Ocala—Fairfield Oil Co. incorporated; H. Clay Crawford, Jr., S. S. Spencer.

Fla., St. Augustine—St. Augustine Gas & Electric Co. let contract to Stacey Manufacturing Co., Elmwood St., Cincinnati, Ohio, for gas holder of 3 lift type, having capacity of 750,000 cu. ft., 110 ft. 6-in. in diam., approximately 130 ft. high; contract involves about 600 tons of steel; foundation now under construction, steel erection about Mar. 15.

La., Baton Rouge—Williams Bros., Scotland, reported laying 12-in. natural gas pipe line for Interstate Natural Gas Co., New Orleans, from here to New Orleans.

La., Lake Charles—Calcasieu Petroleum Co., capital \$25,000, incorporated; W. B. Gabbert, Marguerite Pl.

Miss., Yazoo City—Chamber of Commerce, reported, negotiating with outside capitalists for artificial gas plant.

Mo., Bourbon—Ozark Oil Co., capital \$10,000; W. L. Kimberlin, director.

Okla., Okmulgee—Independent Oil & Gas Co., 619 Commerce Bldg., reported plans big expansion program.

Tenn., Selmer—Dixie Oil Co., Lon A. Scott, Pres., reported establish distribution station.

Texas—Skelly Oil Co., Tulsa, Okla., advises company at present time is planning 20,000,000 ft. plant in east extension of Panhandle field.

Tex., Cisco—McDaniel Oil Corp., capital \$30,000, incorporated; E. R. McDaniels.

Tex., Corpus Christi—City, P. G. Lovenskiold, Mayor, receives bids Mar. 9 for gas mains. See Want Section—Bids Asked.

Tex., Dallas—Merritt Drilling and Development Co., capital \$50,000, incorporated; Robert Carswell, American Exchange Bank Bldg.

Tex., El Paso—Savage Oil Co., capital \$35,000, incorporated; V. H. Anderson, 4205 Pershing Dr.

Tex., Laredo—Motor Fuel & Products Co., Geo. A. Camphuis, reported, construct refinery; plans and specifications being prepared; soon call for bids for material and equipment; cost \$150,000.

Tex., Mercedes—Rio Grande Valley Gas Co., Lashy & Crawford, representatives, San Benito, reported making survey for gas line.

Tex., Mineola—Magnolia Gas Co., Dallas, reported acquired 75 acres as site for compression plant to be used in connection with gas line now under construction from LaTex to Dallas; erect tanks, quarters and commissary, artificial lake of 20 acres for water supply; cost about \$500,000.

Tex., Houston—Shannon Oil Co., capital \$30,000, incorporated; G. S. Shannon, B. E. Styers.

Tex., Orange—Gulf Production Co., Gulf Bldg., Houston, reported installing pumping station and pipe line.

Tex., Panhandle—Phillips Petroleum Co., Bartlesville, Okla., reported, acquired Gibson County Oil Co.'s properties in Hutchinson County, covering about 5000 acres and producing 10,000 bbls. daily, and 60,000 acres in Pecos County, Tex.; Lee and Quay Counties, Mexico.

Tex., Putnam—Humble Pipe Line Co., Humble Bldg., Houston, reported build oil pump station daily capacity 20,000 bbls.; cost \$500,000.

Tex., Lela—Magnolia Petroleum Co., Dallas, advises company is installing gasoline plant in Panhandle in Wheeler County; purchased a Type 75 factory built semi-portable gasoline absorption plant from Southwestern Engineering Corp., Los Angeles, Cal.; plant in-

stalled by company's forces; capacity 5,000,000 cu. ft. of gas daily.*

Tex., San Antonio—Rio Grande Gas Co., reported, let contract to Hope Engineering & Supply Co., Vernon, Ohio, for gas pipe line in lower Rio Grande Valley.

Tex., Wichita Falls—Anderson-Prichard Oil Corp., Colcord Bldg., Oklahoma City, Okla., reported acquired plant of Western Oil Corp. of Texas; operate for refining of technical naphthas for paint, varnish and rubber trades.

Va., Norfolk—City Gas Co., reported, making surveys for extension of gas mains to suburbs.

Ice and Cold-Storage Plants

Fla., Monticello—Jefferson County Power Co. will erect \$30,000 plant, 100x35 ft. and 44x122 ft., steel and concrete, Asbestone corrugated roof, concrete floor, construction by owner; install \$100,000 equipment, including two 300 H.P. Fulton Diesel engines, generators, 20 ton ice plant; furnished by Fulton Iron Works, 126-9 Delmar St., St. Louis, Mo.; Westinghouse Electric Co., E. Pittsburgh, Pa.*

Ga., Fayetteville—Fayetteville Ice & Coal Co., L. G. Perry, plans ice plant; acquired site; Georgia Power Co. furnish power.

Miss., Greenwood—Couch Interests, operators of Mississippi Power and Light Co., reported acquired plant of C. E. Wright Ice Co.; will operate.

Iron and Steel Plants

Ky., Ashland—American Rolling Mill Co., reported, purchased entire stock and holdings of late T. M. Adams in Norton Iron Works plant and Ashland Steel Co.; remodel and operate; acquisition give an additional blast furnace of 350 tons capacity, wire mill, rail mill, wire cloth factory and foundry; Ashland Steel Co., small blooming mill and rod mill. Company wires: "Have acquired T. M. Adams' holdings in Norton Iron Works; gives us a third interest in Ashland Steel Co.; expect to operate Norton Company within next 30 to 60 days."*

Land Development

Ala., Birmingham—Gray Heights Land Co., Lincoln Life Bldg., develop subdivision near Howard College; construct streets, sidewalks, water, sewers.

Ala., Huntsville—Junior Chamber of Commerce reported interested in establishing park system.

Ala., Mobile—Gulf Land Holding Co., incorporated, 1567 Monterey Pl.; J. E. McHugh, Jr.

Ark., Clarendon—City plans voting March 25 on \$10,000 park bonds. Address The Mayor.

Fla., Bartow—Iron Mountain Land Co. incorporated; R. B. Huffaker.

Fla., Jacksonville—Manhattan Co. incorporated; Dena Carantzas, A. C. Carantzas.

Fla., Miami—Goodrich Realty Co. incorporated; Chas. W. Hill, 76 N. E. First St.

Fla., Miami—W. E. Brown Properties, Inc., chartered; W. E. Brown, Reid Bldg.

Fla., Pensacola—Southern Plantation Corp., capital \$50,000, incorporated; Frank H. Farham, Bay Shore.

Fla., Umatilla—Southern Baptist Assembly have plans by E. S. Draper, Landscape Archt. and Engr., Charlotte, N. C., for development of assembly grounds.

Ga., Augusta—United Realty Co., capital \$16,000, incorporated; J. Edelstein, 1160 Broad St.

Ga., Rossville—Realty Investment Co., Long Bldg., capital \$25,000, incorporated; Newton Fryar.

Ga., Valdosta—Robins Co., Ltd., 200 Majestic Bldg., Detroit, Mich., reported, develop 1215 acres near Ray City for farming.

Ga., Waycross—Mayor F. D. Hereford reported acquired 1000 acres in Ware county, including 100 acres pecan grove.

La., Bossier Parish—Curtis Plantation, Inc., capital \$180,000, incorporated; George P. Murray, R. F. D. No. 3, Shreveport.

La., Lake Charles—Island Plantation Co., capital \$150,000, incorporated; W. J. Duhig, Levy Bldg.

La., Monroe—Frank Scott, of Union Sawmill Co., Huttig, Ark., reported, develop 420 acres on Columbia Rd.

La., New Orleans—Gulf States Realty Co., Carondelet and Poydras sts., incorporated; Paul Blum, Jr., 4223 South Franklin st.

La., New Orleans—Biltmore Realty Co. incorporated; Frank Meyer.

La., New Orleans—Tusa Realty Co., capital \$12,000, incorporated; Joseph Tusa, 1918 Louisiana Ave.

La., New Orleans—Burguières, Chipley & Williams, Inc., Jules M. Burguières, Pres., 827 Union St., develop demonstration farms.

Md., Solleys—Portworth Land Co., reported, acquired 200 acres on Stony Creek; develop Portlea sub-division.

Miss., Columbus—Missala Co., St. Louis, Mo., R. C. Hobbs, Pres., develop farm lands.

Mo., Festus—F. W. Brickey Estate, Inc., capital \$100,000, chartered; Norville W. Brickey.

Mo., Kansas City—Foster Realty Co. incorporated; George W. Foster, C. J. Everest.

Mo., St. Louis—Gloria Lee Realty Co. incorporated; Chas. M. Walters, Jr., 3516 Victor St.

Mo., St. Louis—Mullin-Walters Realty Co., capital \$10,000, incorporated; Chas. M. Walters, Jr., 3516 Victor St.

N. C., Kittrell—Continental Plant Co. has plans by E. S. Draper, Landscape Archt. and Engr., Charlotte, for beautifying nursery grounds and State Highway for several miles near nursery.

N. C., Reidsville—Reidsville Insurance and Realty Co. will develop subdivision for C. A. Penn; install water, sewers, curbing, semi-permanent type of paving, expend \$50,000; plans ready in March; Spoon, Lewis & Camp, Engrs., 429 Jefferson Bldg., Greensboro.

N. C., Salisbury—North Hills Corp., capital \$15,000, incorporated; T. M. Hines.

N. C., Walnut Cove—W. H. Sanders is developing tourist camp; install electric lights, etc., also develop mineral sulphur spring.

N. C., Winston-Salem—J. W. Glenn, 1014 W. Fifth St., retained E. S. Draper, Landscape Archt. and Engr., Charlotte, N. C., to supervise landscape construction on estate in country club development, including driveways, walks, stone retaining walls, garden, pools, etc.

N. C., Winston-Salem—Erie Realty Co., capital \$100,000, incorporated; E. C. Hill, 1418 E. Bank St.

S. C., Charleston—Olasov Real Estate Co., capital \$15,000, incorporated; Benjamin Olasov, 69 Broad St.

S. C., Charleston—H. T. Edner reported reclaiming 21 acres land north side Folly River for subdivision development; construct streets, etc.; Sanford & Brooks, in charge of reclamation; surveying by James L. Parker, both People's Bldg.

Tenn., Knoxville—Craig-Cooper-Coffman Co., 205 Mercantile Bldg., capital \$10,000, incorporated; C. W. Coffman.

Texas—Charles Zedler of Winter Haven, new town located between Carrizo Springs and Crystal City, reported acquired 765 acres for development; has completed artesian well for supplying water for irrigation.

Tex., Austin—Stacy Realty Co., Wm. H. Stacy, Pres., is developing 234 acres for subdivision; install streets, sidewalks, build homes.*

Tex., Austin—W. E. Childers, 115 Field St., Dallas, has contract for curbs, gutters and sidewalks for Austin Development Co.'s subdivision; Koch & Fowler, Engrs., 801 Central Bank Bldg., Dallas.

Tex., Beaumont—City, Ollie J. Bloyd, Mgr., develop park on Calder Ave.; will clear grade, construct cement walks, building tennis court, wading pool, sand court, flagstaff, pergola, drinking fountain, cement benches, music shell, comfort station, etc.; Frank L. Bertschler, Landscape Archt.; R. C. Black, City Engr.*

Tex., Brownfield—City Commrs. plans developing park on Tahoka Highway.

Tex., Dallas—Harris-Brown Co., Inc., H. J. Harris, is developing 15 acres for subdivision; installing gas, sewers, lights, water, sidewalks, graveling and grading streets; expend \$15,000; Myers & Noyes, Landscape Archts., Mercantile Bank Bldg.*

Tex., Houston—Fantham & Fantham, West Bldg., developing 116 acre subdivision; expend \$50,000 for shell streets, water system, lights and telephones, natural gas.*

Tex., Plainview—N. R. Northcutt develop 36 acre subdivision; construct streets.

Tex., San Antonio—Milam Realty Co., capital \$100,000, incorporated; Carl D. Newton, 2604 S. Presa St.

Tex., San Antonio—Geo. C. Smith, 2412 Fulton St., Houston, reported develop 35

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acres on Fredericksburg Rd.; install paving, lighting system, sewer and water works.

Tex., San Benito—Venetian Estates, F. M. Discus, plans developing Venetian Estates, 2500 acres; plans include 200 acres for town lots, parks and boulevards; 100 acres for hotel, golf links, etc.; remainder for country estates and citrus fruits.

Tex., San Benito—J. S. Hood, Canadian, and F. M. Dicus, San Benito, reported interested in development sub-division.

Tex., Toyahvale—Koch & Fowler, Engrs., 310 Fidelity Union Bldg., Dallas, reported plans in progress for complete water works system, including surface reservoir, mains and laterals; sanitary sewer system, disposal plant and electric light plant to be built near here for Timber Mountains Development Corp., Lee I. Starling, Pres., 310 Fidelity Bldg., Dallas.

Va., Inglewood, P. O. Gordonsville—Inglewood Farms, Inc., capital \$125,000, chartered; W. J. Morphy, Max Fleischer, Philadelphia, Pa.

Lumber Enterprises

Ky., Vanceburg—Wamsley Lumber Co., capital \$25,000, incorporated; C. M. Wamsley.

Miss., Osyka—Totten Veneer and Lumber Co. increased capital, \$25,000 to \$75,000.

S. C., Hamer—Booth-Parker Lumber Co., Sumter, reported, acquired timber tracts in Dillon County, erect saw mill.

S. C., Rock Hill—J. C. Rosemond Mills, Hillsboro, N. C., establish branch on Pendleton St.; manufacture cedar lumber.

Tex., Houston—Home Lumber Co., 4701 Washington St., increased capital, \$15,000 to \$20,000.

Tex., Sweetwater—Jennings-Long Co., capital \$20,000, incorporated; W. F. Ritter.

Tex., West—Higginbotham—Lumber Co., capital \$30,000, incorporated; R. W. Higginbotham.

Metal-Working Plants

Ala., Birmingham—Universal Metal Manufacturing Co., E. B. Erwin, President reported begun construction of \$50,000 plant at Tarrant City; manufacture filing cabinets and other office equipment.

Mining

Fla., Ocala—Limestone Products, Inc. will develop lime deposits near Santos; begin operating first unit in about 60 days.

Ga., Cartersville—R. K. Miller Minerals Corp., capital \$1,000,000, chartered; R. K. Miller.

Mo., Joplin—Ozark Valley Mining Co., capital \$150,000, incorporated; F. L. Stansbury, H. O. Jenkins.

Oklahoma—Interstate Zinc & Lead Co., R. M. Atwater, Jr., Pres., 25 Broad St., New York City, formed by merger of Cherokee Lead & Zinc Co. with holdings near Treece, Kan.; Oklahoma Woodchuck Mine, with properties near Cardin, Okla., including townsite of Cardin and an undeveloped tract; Hutcheson Management Corp. and Meteor Lead & Zinc Co., with holdings near Picher, Okla., and Hartley mine near Baxter Springs, Kan. Plans extensive improvements at once; place new mill on Cardin lease, to be in operation 1928 second mill on Hartley property to be in operation 1929. Bond issue of \$2,500,000 has been authorized, of which \$1,000,000 five-year 7% sinking fund gold debentures, Series "A," with bonus of capital stock offered through Taylor, Ewart & Co., Inc., Kansas City, Mo.; West & Co., Philadelphia.

Okla., Sand Springs—Lime and Stone Co., Box 743, has plant, daily output 100 bbls.; C. Tingley, Construction Engr.*

Va., Norfolk—Commonwealth Sand and Gravel Corp.; John Twohy, 1002 Magnolia Ave.

Miscellaneous Construction

Ala., Pratt City, Br. of Ensley—Warehouse—Inland Waterways Corp., 1016 Munitions Bldg., Washington, reported, acquired site at the KC crossing in Pratt City; construct freight terminals for river line; brick, with team tracks on two sides; engineers completed surveys.*

Ark., Siloam Springs—Swimming Pool—Wesley Blintz, Lansing, Mich., reported, has tentative site on Sugar Creek for proposed swimming pool.

Fla., Fort Lauderdale—Harbor—Glenn E. Turner, City Auditor-Clerk, receives bids March 11 for construction of Lake Mabel

harbor; Col. E. N. Johnson, Engr. in charge, Hollywood, Fla.*

Fla., Tampa—Tunnel—See Bridges, Culverts, Viaducts.

Ky., Ashland—Mausoleum—Ashland Cemetery Assn. reported let contract to Chappel Building Co., Columbus, Ohio, for mausoleum in the Ashland Cemetery; capacity about 290 crypts; equip chapel, install electric lights, art glass windows, etc.; cost about \$125,000.

La., New Orleans—Terminals—See Railway Shops and Terminals.

Md., Baltimore—Tunnel. See Bridges, Culverts, Viaducts.

Miss., Pascagoula—Seawall—Road Protection Comsn., F. H. Lewis, Pres., receives preliminary plans and specifications from engineers, Mar. 21, for 4½ mi. seawall along beach front of Jackson county, estimated cost \$750,000; 2½ mi. at Pascagoula and 2 mi. at Ocean Springs; roadway along edge of seawall, probably concrete with asphalt covering; Comsn. will pass on plans Mar. 24.

Mo., St. Louis—Speedway, etc.—St. Louis Speedway and Fair Assn. incorporated; Robert E. Lee, 3124 Locust St.; Henry W. Kiel, 1625 Missouri St.; Charles Dorn, 7009 Page St., reported plans expending \$1,250,000 on developing 300 acres near Bridgeton; construct permanent exposition buildings and motor speedway; speedway, 70-ft. wide on straightway, 80-ft. wide on curves, 3-ft. concrete wall extend around length of track; 1 mile dirt track for horse racing inside of oval, parking space for 15,000 cars, tunnel underneath speedway.

N. C., Beaufort—Carteret County Comms. plan constructing shipping pier between Morehead City and Beaufort. See Financial News—Bond Issues Proposed.

N. C., Charlotte—Mausoleum—Oak Lawn Cemetery Co., J. J. Misenheimer, Sec., 13 East 5th st., reported, will construct \$500,000 mausoleum, 95x200 ft., designed in shape of "T"; Mt. Airy granite, bronze fittings; contain total 600 crypts, including eight private rooms; equip service chapel, plans include dome 32-ft. diam.; U. J. Smith, Archt., Union Trust Bldg., Cleveland, Ohio; Charles Wagner and A. A. McDonald, associates.

N. C., Wilmington—Congress authorized extension of Intra-Coastal Canal from Beaufort to deep water in Cape Fear River at Wilmington; about 95 miles long, width 50 ft., depth 12 ft., extending southward via Georgetown, Charleston, Savannah and terminate in Florida; \$5,800,000 for proposed work; also contemplate a 30-ft. channel for Cape Fear River.

N. C., Wrightville Sound—Piers—Shore Acres Co. applied for permit to construct two piers from Shore Acres into Banks channel, each 72 ft. long.

S. C., Columbia—Swimming Pool—Ridge-wood Country Club, plans swimming pool. Address The Secretary.

Tenn., Memphis—Incinerator—City, Rowlett Paine, Mayor, will construct garbage and refuse destructor; bids Mch. 15; C. C. Pashby, Clerk. See Wants Section—Bids Asked.

Tex., Beaumont—City Wharf & Dock Comsn., T. V. Smelker, Chrm., reported, plans expending \$250,000 on municipal wharf improvements. See Financial News—Bond Issues Proposed.

Tex., Galveston—Committee including Mrs. Edward Randall, Chmn., 2004 J St.; Mrs. G. A. Soel, Sec., interested in erecting war memorial shaft in Menard Park; granite, with bronze tablet.

Tex., Houston—Wharves, etc.—B. C. Allin, Director of Port, advises regarding construction of wharves and extension to grain elevator carrier house: "We will probably advertise in about 30 days for approximately 900 ft. concrete wharf, 500 ft. shipside gallery, additional belting and snouting for the elevator, about 14 miles railroad trackage together with necessary material.*"

Tex., Palacios—Harbor and Turning Basin, etc.—See Concrete and Cement Plants.

Miscellaneous Enterprises

Ark., Little Rock—O. K. Ice Cream & Candy Co., Peter Zack and Andrew Mackris, Owners, Sixth and Main St., plan building plant, Eighth and Main St.; install modern equipment; total cost about \$100,000; plans establishing branches in other cities.

D. C., Washington—Two Americas Publishing Co., Inc., capital \$210,000, chartered; W. L. Daley, Investment Bldg.

Fla., Jacksonville—Cosmetics—Seventeen Products Co. incorporated; R. G. Moore, M. B. Marilyn.

Fla., Jacksonville—Ferry—Bayshore Ferry Co., has franchise to operate ferry between Mayport and Pilot Town.

Fla., Kendall—Kendall Quarry & Construction Co., capital \$30,000, incorporated; Fred B. Green, Jr.

Fla., Miami—Florida Chemical Co., capital \$10,000, incorporated; L. B. Chase, J. L. Mueller.

Fla., Orlando—Orlando Dairy Co., Inc., capital \$50,000, chartered; C. E. Fenlon, Mark H. Fox.

Fla., Orlando—Orlando Linen and Towel Supply Co., Inc., capital \$10,000, chartered; H. M. Jarvis, 215 Harwood St.

Fla., Sarasota—Messner Bakery, Inc., chartered; Leo C. Gould, Arthur Messner.

Fla., St. Petersburg—Undertakers—John S. Rhodes, Inc., capital \$25,000, chartered; John S. Rhodes, 635 Fourth St.

Fla., W. Palm Beach—R. H. Price Construction Co., capital \$10,000, incorporated; J. K. Williamson, Olivia Bldg.

Ga., Americus—Emory T. Short, Miami, Fla., reported, acquired Americus Chero-Cola bottling plant; will operate.

Ga., Atlanta—Horne Desk & Fixture Co., W. A. Horne, Pres., 89 N. Pryor St., increased capital to \$100,000.

Ga., Atlanta—Swift & Co., Grant Bldg., let contract to Griffin Construction Co., 308 Spring St., at \$90,000 for branch foundry, 100x150 ft., concrete and brick, concrete floors, tar and gravel roof.*

Ga., Augusta—Company organized to promote manufacture of newly invented cut-off gauge cock for use on locomotives; M. C. B. Helley, Pres.; L. V. Stone, V. Pres. and Inventor, 1531 Schley St.; J. R. Goode, Sec.

Ga., Augusta—Geo. Claussen, Pres., Claussen's Bakery, will repair burned portion of plant; loss \$20,000.

Ky., Bowling Green—Pet Milk Co., Elmer H. Koch, Purchasing Agent, Arcade Bldg., St. Louis, Mo., advises: "Practically all material, machinery and equipment for Bowling Green plant has been ordered and shipped, expect to start operation in near future."*

Ky., Hardinsburg—Merchandise—Eleanor Beard, Inc., capital \$150,000, chartered; Ben G. Robertson.

Ky., Louisville—Kentucky Engineering Co., Inc., capital \$100,000, chartered; S. M. Greenbaum.

Ky., Whitesburg—Childers Drug Co., capital \$10,000, incorporated; B. F. Wright.

Ky., Winchester—Publishing—Winchester Sun, capital \$50,000, incorporated; J. T. Metcalf.

La., Haynesville—Undertaking—Geo. T. Morton & Co., Inc., capital \$25,000, chartered; Geo. T. Morton.

La., Minden—Company organized; W. S. Allen, Mgr., reported, plans \$25,000 steam laundry, including dry cleaning and pressing dept.

La., New Orleans—Saenger New Orleans Theatres, Inc., capital \$100,000, chartered; Julian H. Saenger, 1401 Tulane Ave.

La., New Orleans—Paints, etc.—General Supply Co., Inc., capital \$20,000, chartered; Louis E. Schwark, 6416 Cantina St.

La., Urania—J. E. Freeman advises desires to build laundry in town of about 5000 persons; wants data on equipment. See Wants Section—Machinery and Supplies.

Md., Baltimore—Food Products—Crosse & Blackwell, Ltd., London, and 105 Hudson St., New York City, let contract to M. A. Long Co., 10 W. Chase St., Baltimore, for first \$225,000 unit of plant Eastern Ave. near Forty-second St.; brick work to Stahl & Sprol, Munsey Bldg.; reinforcing steel to Truscon Steel Co., Youngstown, Ohio; Clark, McMullen & Riley, Engrs., 101 Park Ave., New York City.*

Md., Cumberland—Zihlman Glass Co., capital \$75,000, incorporated, Albert E. Zihlman, James J. Kirk; has tentative site near Franklin St. for plant, equipped with latest appliances and electrically driven machinery; use continuous tank system, capacity 15 tons; manufacture tumblers, art glassware, etc.

Md., Easton—Fire Fighting Equipment—Town, Richard Goldsborough, Clerk, install additional fire fighting equipment. See Financial News—Bond Issues Proposed.

Mo., Carthage—Overalls, etc.—Smith Brothers Manufacturing Co., 526 Howard St., begun construction of warehouse; cost \$12,000.

Mo., Clayton—Lincoln Beach Amusement

In writing to parties mentioned in this department it will be of advantage to all concerned if the Manufacturers Record is mentioned.

& Realty Co. incorporated; Arthur L. Autenrieth.

Mo., Jefferson City—Carrothers Construction Co., capital \$10,000, incorporated; H. H. Carrothers.

Mo., Joplin—Joplin Cheese Co., F. W. Heibel, Mgr., is constructing 2-story building, Tenth St. and Sergeant Ave.; 40x70 ft., concrete; install equipment, including 2 vats with total capacity 15,000 to 20,000 lbs. milk, all purchased; soon be in operation.*

Mo., Kansas City—Fruit Syrups—Geo. A. Fox Products Co., capital \$30,000, incorporated; Geo. A. Fox, 1812 Oakland St.

Mo., Kansas City—Electrical Appliances—Monark Refrigerating Co., capital \$50,000, incorporated; Alex. A. Smith, 3655 Campbell St.

Mo., Kansas City—Plumbing Supplies—Baker Manufacturing Co., 4214 Troost Ave., acquired site at 4226 Troost St.; 100-ft. frontage; erect display and salesroom.

Mo., Kansas City—Loft Building—J. H. Ross, Pres., Ross Manufacturing Co., 1225 Lydia St., reported acquired 125x160-ft. property cor. Eleventh and Campbell Sts.; probably erect loft building.

Mo., Kansas City—Heating Devices—Washburn Furnace & Chimney Co., 3668 Troost Ave., capital \$10,000, incorporated; Byron F. Washburn.

Mo., Kansas City—Eisen Mercantile Co., 68 Walnut St., capital \$40,000, incorporated; Abe Eisen.

Mo., Kansas City—Dry Cleaning—W. E. Franklin, 2930 Charlotte St., will erect \$30,000 plant at 3600 Troost St.

Mo., Marceline—Dairy Products, etc.—Farmers Elevator Co., capital \$10,000, incorporated; C. E. Reynolds.

Mo., St. Joseph—The Western Tablet & Stationery Corp., executive offices 1401 Third Nat. Bank Bldg., Dayton, O. W. W. Sunderland, Pres.-Treas.; G. W. Helitz, Sec.-Gen. Mgr., owns and operates plants for manufacture of stationery and paper tablets at St. Joseph, Mo.; Kalamazoo, Mich.; Richmond, Va.; Holyoke, Mass.; West Carrollton, Ohio; Minneapolis, Minn.; and Green Bay, Wis.; business will be conducted in name of the constituent companies, organized and operated as subsidiaries.

Mo., St. Louis—Crean & Scott Construction Co., capital \$50,000, incorporated; W. J. Crean, 4141-A Shaw St.

Mo., St. Louis—Frank B. Parker Bindery Co., Inc., chartered; Hillis Parker, 4044 Lafayette St.

Mo., St. Louis—Musical Instruments—Sporleder Music House, Inc., capital \$10,000, chartered; Paul Sporleder, 7315 Hoover St.

Mo., St. Louis—Jack Rabbit Clothes Co. incorporated; Walter S. Marx, 16 Washington Terrace.

Mo., St. Louis—Swift Packing Co., 800 S. Vandeventer St., has permit for \$10,000 addition to machine shop, 1-story, 60x100 ft., brick, asphalt roof; McKelvey Construction Co., Contrs., 3800 W. Pine St.

Mo., St. Louis—Northwestern Bottle Co., Eighteenth and Biddle St., leased two buildings, Broadway and Dock St.; will remodel.

Mo., St. Louis—Imperial Cleaning & Dyeing Co., Inc., capital \$15,000, chartered; Laurence G. Lindemann, 4121 Clay St.

Mo., St. Louis—St. Louis Finishing Co., capital \$20,000, incorporated; C. D. Smiley, 5501 Waterman St.

Mo., Trenton—W. B. Rogers Printing Co., publishers of Republican-Tribune, reported, purchased the Trenton Times; will consolidate.

N. C., Asheville—Snell Metal Sign Co., capital \$50,000, incorporated; J. W. Snell, R. C. Crowell.

N. C., Ayden—Hotel Beverly, Inc., capital \$50,000, chartered; C. V. Cannon, R. C. Cannon.

N. C., Greensboro—Plumbing, etc.—Whitman Co., capital \$150,000, incorporated; W. M. Jenkins, 212 E. Bessemer St.

N. C., Greensboro—North Carolina Advocate, A. W. Plyler, Editor, E. Gaston St., reported, let contract to Walter Klidde & Co., Greensboro, and 140 Cedar St., New York, for plant, 249 W. Gaston St.; 2-story, 53x104 ft., reinforced concrete, fireproof; heating to Howerton & Benner Co., 228 W. Market St.; plumbing to Crutchfield Plumbing Co., 311 S. Green St.; electrical equipment to Harold L. Ross, 112 E. Fisher Ave.; elevators to Otis Elevator Co., 322 S. Davis St.; Charles C. Hartmann, Archt., Jefferson Bldg.*

N. C., Greensboro—Plumbing—Whitman

Co., capital \$150,000, incorporated; W. M. Jenkins, 212 E. Bessemer St.

N. C., High Point—Southern Spring Manufacturing Co., capital \$100,000, incorporated; E. N. Phillips, W. S. Davis.

N. C., Lenoir—Lenoir Modern Cleaners, 110 Harper Ave., have completed improvements and installed machinery, furnished by Glover Sales Co., Voreclone Tumbler Co., Adams Laundry Machinery Co., Hoffman Machinery Co., Troy, N. Y., Hopkins Manufacturing Co., Hanover, Pa.*

N. C., Mill Springs—Mill Spring Mercantile Co., capital \$20,000, incorporated; R. G. Walker.

N. C., Williamston—W. I. Skinner and Jin King, reported, acquired Williamson tobacco redrying plant; will operate.

Okla., Blackwell—Abattoir—Turvey Packing Co., Geo. Turvey, Mgr., plans additions double capacity, add story to killing floor, erect tank for additional water supply for cooling system, install electric hog scraper, capacity 75 hogs pr. hr., equip new pens with modern feeding apparatus, etc.

S. C., Spartanburg—Elite Candy Manufacturing Co., capital \$20,000, incorporated; Geo. M. Harakas, 287 Hydrick St.

Tenn., Chattanooga—Philadelphia Toboggan Co., 130 E. Duval St., Germantown, Philadelphia, Pa., has contract for installing roller coaster, old mill, Custer cars, etc., in Warner Park.

Tenn., Cookeville—Cookeville Printing Co., publishers of Upper Cumberland News, purchased Putman County Herald, will consolidate, publish under name of Putman County Herald; B. Stone, Editor.

Tenn., Etowah—Superior Laundry Co., capital \$25,000, incorporated; W. L. Schenck.

Tenn., Hollywood—Purity Chemical Co. increased capital, \$10,000 to \$18,000.

Tenn., Jackson—Barbecue Accessories—Freeman Barbecue Pit Co., incorporated; E. A. Freeman and D. T. Henderson.

Tenn., Johnson City—Franklin Printing & Office Supply Co., capital \$10,000, incorporated; R. W. Taylor.

Tenn., Johnson City—C. C. Cox Dairy Co., Boone St., erect addition for ice cream department.

Tenn., McMinnville—City reported plans installing fire fighting equipment. Address City Clerk.

Tenn., Memphis—Restaurants—Gunther's, Inc. capital \$20,000, chartered; W. A. Gunther, John W. Lock.

Tex., Abilene—Fairy Form Lingerie Co., Geo. C. Bacon, Pres. moving plant from Bellville, installing additional machinery, increasing capacity.*

Tex., Bryan—Mercantile—T. K. Lawrence, Inc., capital \$30,000, chartered; G. S. Parker.

Tex., Dallas—Cline Music Co., capital \$10,000, incorporated; Durward J. Cline, 310 Melba St.

Tex., Dallas—Undertaking—Loudermilk-Sparkman Co., Inc., capital \$125,000, chartered; Will R. Sparkman, 2115 Ross St.

Tex., Dallas—Southwestern Cap and Gown Co., capital \$15,000, incorporated; J. B. Jones, 3803 Cleveland St.

Tex., Dallas—Merchandise—Stacold-Dallas Co., Inc., chartered; John A. Billings, Harry E. Parkins.

Tex., Dallas—The Dye Corp., capital \$30,000, incorporated; M. B. Shannon, Magnolia Bldg.

Tex., Del Rio—Producers Wool & Mohair Co., C. O. Fokes, Mgr., let contract to H. M. Hutchinson, Del Rio, at \$11,000 for 90x100-ft. warehouse, brick and tile walls, concrete floor, steel door and windows, five ply roof, construction under way; install Toledo scales; Carter & Hall, Archt., San Angelo.*

Tex., El Paso—Builders Co., Inc., capital \$50,000, incorporated; E. C. Simmons, 1414 N. Pledras St.

Tex., Galveston—The Dollar Bay Fig Corp. reported, acquired 1000 acres on Galveston Bay, plans for development not made.

Tex., Harlingen—Frank Svadenak, plans \$30,000 bakery, 2-story, brick and concrete; install bakery machinery; R. W. Mulhausen, Archt.

Tex., Houston—Fig Preserving—The M. G. Clymer Co., 1019 Electric Bldg., advises regarding erection fig preserving plant: "We are still in the organization stage and as soon as our finances are properly arranged we will start building."*

Tex., Houston—Max Krost, Sec., Public Laundry, will soon invite bids for \$100,000 plant, W. Webster and Genesee St., Joseph Finger, Archt.

Tex., Houston—Oxygen—Linde Air Products Co. of Texas, main office 30 E. 42nd St., New York City, reported, let contract to Don Hall, Cotton Exchange Bldg., at \$50,000, for factory building at Harrisburg Blvd. and Texas St.; 1 story, 61x95 ft., reinforced concrete, brick and hollow tile, steel reinforcements; monitor wall for second story 13x20 ft.; Orange Car & Steel Co., Orange, Tex., furnish and fabricate steel; L. E. Febvre, Const. Engr.

Tex., Houston—Gas Appliances—Unit Manufacturing Co. incorporated; H. E. Dickinson, Edward E. Fournier.

Tex., Kingsville—Eagle Hardware and Furniture Co., Inc., capital \$10,000, chartered; G. I. Gilliland.

Tex., Navasota—Navasota Sweet Potato Curing Co. remodel plant, capacity 10,000 bu.*

Tex., Palacios—See Concrete and Cement Plants.

Tex., Paris—Southern Creameries, main plant Texarkana, Tex., subsidiary of the Southern Ice and Utilities Co., J. M. Record, Mgr., advises: "Are establishing 8 cream stations for purpose of developing dairy industry; all cream purchased around Paris is shipped to Texarkana plant."*

Tex., Pampa—Pampa Hospital, capital \$40,000, incorporated; Archie Cole.

Tex., San Antonio—Lone Star Baking Co., 902 Commerce St., reported, acquired site, S. Presa and Virta Sts., for bakery plant; 2 or 3 story and basement, brick, stone, reinforced concrete, fireproof; estimated total cost \$250,000; M. Malos, Travis Bldg., Contr.

Tex., San Benito—Reuter Seed Co., Inc., chartered; Fred L. Myers.

Tex., Temple—Southwestern Transit Co., capital \$10,000, incorporated; L. S. Deaver.

Tex., Wichita Falls—Texas Pipe and Supply Co., capital \$54,000, incorporated; L. E. Whitham, 1901 Austin St.

Tex., Wichita Falls—E. B. Lebrack Ice Cream Co., capital \$50,000, incorporated; R. O. Kenley, Jr., Iowa Park Rd.

Va., Charlottesville—Contracting—Smith Electric Co., Inc., capital \$15,000, chartered; J. H. Smith.

Va., Norfolk—Toilet Articles—The Dentisine Co. Inc., chartered; Hubert S. White, Pres., 1310 Brunswick Pk.

W. Va., Clarksburg—Pittsburgh Plate Glass Co. reported plans install sheet drawing glass machinery in Clarksburg window glass plant.

W. Va., Oak Hill—J. W. Roland, recent Editor of Pike County News, Pikeville, Ky., acquired Fayette County Republican; will edit.

Motor Bus Lines and Terminals

Tex., Dallas—Southern Transportation Co., 1100 Wood St., changed name from Southern Transportation Lines; increased capital, \$10,000 to \$20,000.

Tex., Houston—Houston Electric Co., 800 Texas St., reported plans establishing bus lines. See Miscellaneous Enterprises.

W. Va., Charleston—Red Bird Transit Co. (under management of Blue and Gray Lines), 601 Virginia St., old route from Clendenin to Spencer, granted extension into Charleston from Clendenin; entire route 52 miles; temporary equipment used until new can be secured; terminals at Spencer and Charleston; use present garage of Blue and Gray lines in Charleston.*

W. Va., Huntington—Interstate Motor Transit Co., James P. Grubb, Mgr., Fifth Ave. Arcade, reported absorbed the Cannon Ball Transportation Lines; for present retain both bus terminals on Fifth Ave.; company gains control of about 50 buses operating between Columbus, Ohio, and Charleston, W. Va., and later plans extensions.

Motor Cars, Garages, Filling Stations

Ark., Little Rock—Sample Motor Co. plans \$50,000 building; soon begin construction.

Ark., Little Rock—Wells-Taylor Motor Co. plans erecting \$20,000 addition.

Fla., Jacksonville—Royal Motors Co. has permit for \$60,000 building on Riverside Ave.; 1 story, 80x230 ft., steel and stucco; Hearn Construction Co., Contr.; C. B. Schoepel, Archt.*

Fla., Jacksonville—M. L. McCormick has permit for 1-story filling station for W. J. Bryson Paving Co., 239 W. Adams St. on Myrtle Ave., between Thirteenth and Fourteenth St.; cost \$10,000.

Fla., Jacksonville—Jacksonville Sight See-

In writing to parties mentioned in this department it will be of advantage to all concerned if the Manufacturers Record is mentioned.

ing Service, Inc., capital \$10,000, chartered; John T. Rockett, A. E. Hodson.

Fla., Lakeland—Reo-Lakeland Motor Co., capital \$25,000, incorporated; Chas. W. Rhodes, W. H. Rhodes.

Fla., Okeechobee—Tri-County Tire Co., Inc., capital \$10,000, chartered; G. C. Durance, John C. Parker.

Fla., St. Augustine—Ray L. Hendricks, 38 S. Park Ave., has permit for \$40,000 sales and service station for St. John's Motor Co. on San Marco Ave. and Ballard St.

Ga., Savannah—Company organized, E. J. Thomas, Jr., Chmn., 19 E. Bay St., reported, plans \$200,000 automobile garage on Bay St. near W. Broad, 3-story, reinforced concrete, fireproof, capacity 320 cars.

La., Lake Charles—Gulf States Utilities Co., N. Ryan St., let contract to Thrall & Shea, 314 Pajo St., for \$20,000 garage (reconstruction), 161x55 ft., brick and steel, concrete floor, asbestos roof; install automobile shop equipment.*

La., New Orleans—Liberty Oil Co., 518 S. W. Charles St., received low bid from Gitz & Geier for filling station on S. Clairborne Ave. at Louisiana Ave., brick and stucco; Sam Stone, Jr., & Co., Archts., Masonic Temple Bldg.

La., Ruston—DeFreese Brothers, acquired site, S. Vienna and Louisiana Ave.; plan erecting 66x120-ft. garage and sales room.

Miss., Biloxi—Superior Oil Co., F. B. Royster, Mgr., let contract to B. A. Desporte, for service stations, different locations in city; frame, sheet iron and stucco; install ground tanks, pumps, air pump, etc. See Wants Section—Machinery and Supplies.*

Miss., Biloxi—Southern Service, Inc., chartered; R. H. Pringle.

Miss., Gulfport—Markham Garage, Inc., capital \$25,000, chartered; L. A. Reinert, W. C. Lawrence; acquired 150x125-ft. site on Twenty-third Ave.; erect and operate general automobile and storage and service garage.

Mo. Jefferson City—B. and J. Auto Exchange, Lee Jordan, Jr., and Howard Beeson, Mgrs., will erect 1-story garage building, Mulberry and McCarty Sts.; Lee Jordan Lumber Co. in charge of construction and furnish materials.

Mo., Jefferson City—City Tire & Battery Station, Kemp Ael, Owner, plans erecting 50x90-ft. garage and service station at 328 E. Capitol St., 1-story, brick, plate glass, soon let contract.

Mo., Kansas City—Charles L. Carter, 5844 Grand Ave., will erect \$20,000 motor sales room, 100-10 E. Forty-third St.

Mo., St. Louis—Edward L. Kuhs Realty Co., 2831 N. Grand Ave., reported, erect 3-story, fireproof garage building at 3656 Washington Blvd., to be occupied leased by Jacob Cohen, Pres., Rosedel Garage, Inc., 6120 Delmar Blvd.; to be known as Grand-Washington Garage; will install automobile accessory stores, battery shop, repair shop, vacuum system for cleaning, etc.

Mo., St. Louis—Progressive Auto Repair Co., incorporated; Max Kloeris, 5206 Kansas St.

Mo., Springfield—Shockey Tire Co., Leonard M. Shockey, 312 E. McDaniel St., reported, will erect \$50,000 building.

N. C., Raleigh—Auto Car Co., capital \$100,000, incorporated; W. W. Merriman, Jr., 1101 Mordecai Dr.

Okla., Tulsa—McCreery Tire and Service Co., D. C. McCreery, Pres., 214 E. Second St., let contract to Allen & Scott Construction Co. for tire and service station, Tenth and Cincinnati Ave.; estimated cost \$80,000; 100x140-ft. site; 40 cars at one time.

S. C., Greenville—Hudson-Essex Co., capital \$15,000, incorporated; E. D. Cody, 207 W. Earle St.

S. C., Greenville—Texas Oil Co., acquired site cor. W. McBee Ave. and Academy St.; erect filling station.

Tenn., Memphis—Chevrolet Motor Co., R. H. Grant, V. Pres., reported, probably erect \$125,000 building, on S. Front St., 2-story, 90x170 ft., brick and concrete; C. G. Smith local zone Mgr.

Tenn., Nashville—DeFord Auto Equipment Co., incorporated; N. B. Hays, Sr., 4605 Park Ave.

Tenn., Riceville—D. D. and H. A. Collins erecting garage on Lee Highway, 45x74 ft., brick, steel and concrete; to be known as Eagle Motor Co.

Tex., Austin—Capitol Chevrolet Sales Co.,

Inc., 220 E. Fifth St., increased capital, \$15,000 to \$45,000.

Tex., Austin—Robinson Motors, Inc., capital \$35,000, chartered; J. T. Simmons, 15 Enfield Rd.

Tex., Beaumont—Eastern Texas Electric Co., let contract for garage addition to car barn, for repairs on buses operated by Company; 100x40-ft., steel frame, galvanized covering, concrete floor, iron roof, cost \$10,000.*

Tex., Brownwood—Gregg and Agrellus Motor Co., capital \$30,000, incorporated; Saunders Gregg.

Tex., Hereford—Brumley Chevrolet Co., Inc., capital \$15,000, chartered; G. W. Brumley.

Tex., Houston—W. A. Dowdy, City Archt., has plans for municipal garage, 1-story, U-shaped, each wing 20x122 ft., reinforced concrete, hollow tile and stucco; cost about \$20,000; capacity 35 automobiles, portion for repair shop.

Tex., Houston—M and M Motor Co., Inc., chartered; Ralph Rucker, L. W. Morganstern.

Tex., McAllen—C. A. Rainwater, Archt., preparing plans for 100x140-ft. garage; brick and concrete.

Tex., Terrell—Mayfield Motor Co., capital \$25,000, incorporated; M. G. Mayfield.

Va., Appomattox—Appomattox Motor Co., capital \$15,000, incorporated; W. F. Woolfolk.

Va., Danville—Five Forks Service Station, Inc., capital \$15,000, chartered; K. C. Arey, 281 Carolina Ave.

Va., Danville—General Tire & Supply Co., capital \$10,000, incorporated; W. F. Amnette, A. B. Richardson.

Railway Shops and Terminals

La., New Orleans—Southern Pacific R. R. Co., R. W. Barnes, Ch. Engr., Houston, Tex., reported has permit for \$100,000 fruit and vegetable terminal on site bounded by Poydras, Front, Delta and Lafayette Sts.; steel construction; probably be handled by company's construction department; C. S. Fay, Traffic Mgr.

N. C., Durham—Southern Railway System, H. W. Miller, Vice-Pres., Washington, D. C., advises regarding yard and terminal which may be built at Durham: "This work has not yet been built; if authorized will consist merely of 3 or 4 yard tracks and small wooden engine shed to hold one engine."*

Roads, Streets and Paving

In connection with LAND DEVELOPMENT large sums are expended for roads, streets, paving and sidewalks. Details will be found under that classification.

Proposed Construction

Ala., Bessemer—City, J. M. Scott, Clerk, plans about 2 mi. street paving, including Nineteenth, Twenty-first; sidewalks on various streets, including Thomas St.

Ala., Birmingham—Jefferson County Board of Revenue plans road from Hueytown to Cottage Hill. Address County Engr. Rogers.

Ala., Birmingham—City Comm. plans expending \$52,590 for improvement on 5 streets including Seventh, Princeton Ave.; A. J. Hawkins, City Engr.

Ala., Huntsville—City plans paving several streets and avenues, including Ward Ave., Clinton and School St. Address City Clk.

Ala., Opelika—City plans 2 blocks street and one block sidewalk paving. Address City Clk.

Ala., Tusculumbia—State Highway Dept., Montgomery, plans 25 mi. road between Tusculumbia and Margerum, cost about \$300,000; W. A. McCalla, State Highway Engr.

Ark., Benton—Rosamond & Son, Ouachita St., Hot Springs, low bidders, at \$31,886 to pave 2 sections Little Rock-Hot Springs Highway in Benton and in Dist.; A. M. Lund, Dist. Engr.

Ark., Fayetteville—City plans 6-in. concrete 21-ft. wide paving, North Duncan St., Dickson to Putnam; estimated cost \$16,500. Address City Clk.

Ark., Little Rock—Board of Commrs., Charles Vestal, Chmn., plans organizing district to build Lincoln Ave. Route to Pulaski Heights, cost \$288,652; Frank A. Pritchett, Engr.

Ark., Marianna—Lee County plans gravel-

ing 2 roads: Rondo road, connecting with Marianna-Helena road, at O'Shield's Store; Aubrey road, connecting with Marianna-Moro road, at S. S. Smith's filling station. Address County Commrs.

D. C., Washington—Dist. Commrs. receive bids Mar. 14 for resurfacing 100,000 sq. yd. streets and widening projects authorized by Congress; Mar. 15, 100,000 cu. ft. resurfacing by heater method; Mar. 16, 2 groups concrete roadway building, 100,000 sq. yd. in each group; Mar. 17, paving 60,000 sq. yd. alley and 30,000 sq. yd. sidewalks; cost \$2,000,000.

Florida—State Road Dept., Dr. Fons A. Hathaway, Chmn., Tallahassee, receives bids Mar. 22 for 10 roads and 3 bridges, totaling about 90 mi. paving, 30 mi. grading and 800 ft. concrete bridges: Sarasota County, 19 mi. paving, from Sarasota to Venice; Lake County, paving, Helenarun to Groveland; Seminole County, paving, Sanford to Orange County line; Brevard County, paving, Sharpes to Bonaventure; Clay County, paving, Green Cove Springs to Black Creek; Charlotte County, 3½ mi. paving, Punta Gorda and Fort Myers; Hardee County, paving, Buchanan to Brownsville; Levy County, paving, Bronson to Marion County line; Orange County, grading, Plymouth to Orlando; Columbia County, grading, Lake County to Union County line; Dade County, concrete bridge across Little River; Leon County, concrete or timber bridge; Jefferson County, concrete or timber bridge.

Fla., Avon Park—Highlands Lakes Development, P. J. Bredon, Treas., Bennett Associates, plans 2½ mi. 6-in. rock base, asphalt and slag surface paving of drive around Lake Lillian.

Fla., Avon Park—City plans rock base asphalt treatment drive around Lake Tulane from Cornel St., east side; Phil Lacey, City Engr.

Fla., Bronson—Levy County Commrs., L. W. Drummond, Clk., receive bids March 8 to surface-treat 10 mi. rock Chiefland and Sumner Rd., Chiefland towards Sumner; 6 mi. Otter Creek and Gunntown Rd.; 5 mi. Morriston-Gunntown Rd.; W. R. Hodges, Chmn.

Fla., Clearwater—City Comm. receives bids soon to complete pavement in city park at island terminal of causeway.

Fla., Fort Myers—City Comm. plans about 20 mi. paving, including 60 streets; cost \$2,000,000. See Financial News—Bond Issues Proposed.

Fla., Fort Myers—Lee County Commrs. plan 4 mi. road from Bonita Springs to Gulf of Mexico, cost \$56,000. See Financial News—Bond Issues Proposed.

Fla., Gainesville—Alachua County Board of Bond Trustees, Special Road and Bridge Dist. No. 1, W. R. Thomas, Chmn., receives bids Mar. 22 for 98,900 sq. yd. 6-in. and 42,000 sq. yd. 8-in. compacted lime base, 30,000 cu. yd. grading; plans on file and from Henry L. Baker, Dist. Engr.

Fla., Hollywood—Town plans paving, sidewalks, curbs, gutters and storm sewers on various streets, estimated cost \$68,000. Address Town Clk.

Fla., Inverness—Citrus County Commrs. plan 2 roads: From Inverness east to Withlacoochee River, link of road from Wildwood to Inverness; County's section of Gulf Highway.

Fla., Jacksonville—City Comm., Frank H. Owen, Chmn., Public Utilities, plans receiving bids within 60 days for street paving, vitrified brick on compacted limerock base; concrete pavement and asphalt pavement on concrete or limerock base; estimated cost \$400,000; W. E. Sheddan, City Engr.

Fla., Madison—State Road Dept., Dr. F. A. Hathaway, Chmn., Tallahassee, received \$241,000 road bond issue from Madison County toward paving State Road No. 1 through county.

Fla., Ormond—Town lets contracts within 50 days for about 30 mi. sidewalks in village, one on mainland; S. N. Caldwell, Village Mgr.

Fla., Pensacola—State Road Dept., Dr. F. A. Hathaway, Chmn., Tallahassee, plans gravel and oil treatment, Old Spanish Trail, Pensacola to sand-clay surface connecting with hard-surfacing now being laid east of Tallahassee.

Fla., Sebring—City, A. M. Wolfe, Clk., receives bids Mar. 22 for 2,369 sq. yd. excavation, 2,369 sq. yd. brick, concrete or bituminous pavement, 2,750 lin. ft. concrete curb; plans on file and from E. M. Clawson, City Engr.

Fla., St. Augustine—St. Johns County Commrs., O. P. Goode, Clk., receives bids

In writing to parties mentioned in this department it will be of advantage to all concerned if the Manufacturers Record is mentioned.

Mar. 8 to build or improve 2 roads: Road No. 4, 63,500 lineal feet. 2x8-in. cypress curbing and 7-in. lime-rock base and bituminous surface treatment; Road No. 5, 38,500 lin. ft. 2x6-in. cypress curbing, 35,000 sq. yd. lime-rock base and bituminous surface treatment or 38,500 lin. ft. 2x8-in. curbing and 35,000 sq. yd. 7-in. oyster-shell base and bituminous surface treatment; plans from County Mgr.

Fla., St. Augustine—D. P. Davis Properties, Anderson Circle, developers Davis Shores, plan paving with concrete approaches to Anastasia and St. Augustine Bldgs.

Fla., Stuart—Martin County Comms. plan building several roads, including roads to St. Lucie Inlet on both sides; complete Gaines Highway to Lake Okeechobee; Martin Highway to Okeechobee County line, etc. See Financial News—Bond Issues Proposed.*

Fla., Vero Beach—City, H. G. Redstone, Clk., plans paving every unpaved street and Seventh, Dixie Highway to causeway; cost \$500,000; Carter & Damerow, Inc., Engrs.

Ga., Waycross—State Highway Board, John N. Holder, Chmn., East Point, will let contract in April for 7 mi. hard-surfacing road, Waycross to Waresboro, Ware County, cost \$50,000; will let contract in fall to hard-surface highway from Waycross to Clinch County line.

Kentucky—State Highway Comn., Frankfort, received low bids for five roads: Daviess County, 3.3 mi. river gravel, St. Joseph to Beech Grove, Yewell & Ellis, Owensboro, \$18,269; McLean County, 3.9 mi. bank gravel, Daviess County line to Beech Grove, Corum Bros., Madisonville, \$23,207; Muhlenberg County, 7 mi. grade and drain, Central City to Drakesboro, Yewell & Ellis, \$105,430; Hickman County, 7 mi. bank gravel, W. F. Robinson & Son, Owensboro, \$72,660; Carlisle County, 3.9 mi. bank gravel, H. Latta Smith, Sturgis, \$35,646.*

Ky., Fulton—City plans permanent street in downtown section. Address City Atty. Nichols.

Ky., Lawrenceburg—State Highway Comn., Frankfort, received low bid from Ben W. Gorham Co., Harp and Innes Park, Lexington, \$138,735 for 5.6 mi. Lawrenceburg-Haroldsburg road, Anderson County.*

Ky., Maysville—Mason County Comms. Court. Robert Duvall, Road Supvr., plans improving 5 roads: Clark's Run Pike, Fernleaf and Dover road, Sardis to Lexington Pike, Mt. Carmel, Charleston Bottom road; estimated cost \$165,000; also plans improving 27 roads, including Cliff, Needmore-Murphysville, Shannon-Lowell.

Ky., New Castle—State Highway Comn., Frankfort, receives bids Mar. 31 for 8.7 mi. New Castle-Frankfort road, through North Pleasureville, via Defoe, Henry County, to Shelby County, and on to Franklin County; E. N. Todd, State Highway Engr.

Ky., Somerset—State Highway Comn., Frankfort, plans hard-surfacing Cincinnati-Lookout Mountain Air-Line Highway, Somerset to Tennessee State line.

La., West Monroe—City, C. C. Bell, Mayor, plans paving 5 streets, including Commerce St., Linderman Ave.

Md., Baltimore—Board of Awards receives bids Mar. 9 for 41,000 cu. yds. grading in Cont. No. 385; Steuart Purcell, Highways Engr.; B. L. Crozier, Ch. Engr.; Howard W. Jackson, Mayor; plans on file.

Md., Baltimore—Board of Estimates authorized expenditure \$25,000 to pave sections of 7 streets, including Garrett Ave., Payson St., Tioga Parkway; also \$282,000 for sewers; Steuart Purcell, Highways Engr.; B. L. Crozier, Ch. Engr.; Howard W. Jackson, Mayor.

Md., Baltimore—Highways Bureau, Nathan L. Smith, Paving Engr., plans grading and extending and paving Mondawmin Ave., Chelsea Terrace to Lyndhurst Ave.; Howard W. Jackson, Mayor.

Miss., Decatur—Newton County plans 2 roads: From Newton County line across county east and west; Newton to Union. Address Board of Suprs. See Financial News—Bond Issues Proposed.

Miss., Greenville—State Highway Dept. Jackson, completed plans for about 5 mi. concrete highway from Greenville to ferry across Mississippi River; 25-ft. wide roadbed, 18-ft. concrete surface.

Miss., Pascagoula—Jackson County Road Protection Comn., F. H. Lewis, Pres., receives bids Mar. 21 for furnishing plans, specifications and estimates of cost of building 2 or more miles paved highway, paved sidewalks

and seawall or device complete, for road or highway protection along Pascagoula Beach; asphalt, concrete, curbing, gutter, sidewalk, excavation, etc.*

Miss., Paulding—Jasper County Board of Suprs. receives bids Mar. 14 for about 10 mi. Louin-Newton Road, from point in Montrose to Newton County line.

Mo., Cape Girardeau—City plans paving 4 streets, including Locust, Benton; Ed. Sailer, City Engr.

Mo., Joplin—City, Maude E. Fones, Clk., plans concrete curb and gutter on Harlem, Twentieth to Twenty-third St.; S. P. Ashcraft, Jr., City Engr.

Mo., Springfield—Greene County plans highway improvement; W. H. Schreiber, Asst. County Highway Engr.

N. C., Hendersonville—Henderson County Comms. plan hard surfaced road from Hendersonville to Buncombe County line through Mills River township.

Okla., Ada—State Highway Comn., Oklahoma City, plans letting contract for Ada-Stratford road, Pontotoc County.

Okla., Oklahoma City—City, M. Peshek, Clk., plans improving 22nd St.; B. M. Hart, Engr.

Okla., Seminole—City plans 6900 sq. yds. 7-in. concrete paving in Dist. No. 4; V. V. Long & Co., 1300 Colcord Bldg., Oklahoma City.

Okla., Tulsa—City plans expending \$1,000,000 for paving in 1927. Address City Clk.

S. C., Greenville—Greenville County Comms. receive bids probably Apr. 10 to grade upper half Greenville-Easley Highway, mountains to North Carolina line; preparing plans to improve Piedmont and Augusta Highways from end of present pavement to county lines; W. N. Cruikshank, County Supvg. Auditor.*

S. C., Greenville—Greenville County Comms. plan receiving bids Apr. 10 to grade 8.5 mi. Buncombe road; W. N. Cruikshank, County Supvg. Auditor.*

S. C., Spartanburg—City plans paving West Main St. between Thompson and connecting with Highway No. 8 at city limits; D. G. Adams, City Engr.

S. C., Spartanburg—City, Comn., T. J. Boyd, Clk., plans extending St. John St. to East Main St.; plans widening 10 ft. and paving with brick, Magnolia St., between Wofford and railway property; D. G. Adams, City Engr.

Tennessee—Dept. of Highways and Public Works, Nashville, plans letting contracts about April 1 to hard-surface three roads: Anderson County, 20 mi. Knoxville-Cincinnati highway, Knox County line to Campbell County line, through Clinton; Hamblen County, 8½ mi. Highway No. 2, Knoxville-Bristol road, Morristown toward Greenville; Bradley County, 10 mi. Highway No. 2, Knoxville-Chattanooga, Charleston to Cleveland; C. N. Bass, State Highway Comn.

Tenn., Alton Park Branch, Chattanooga—Town, S. G. Kinsey, Mayor, plans street paving. See Financial News—Bond Issues Proposed.

Tenn., Knoxville—Dept. of Highways and Public Works, C. N. Bass, State Highway Engr., Nashville, plans maintaining and improving road from Sweetwater through Madisonville to Tellico Plains.

Tenn., Memphis—Shelby County Comn., E. W. Hale, Chmn., plans expending about \$500,000 to gravel-surface and extend roads.

Tenn., Memphis—City, C. C. Pashby, Clk., plans paving North Cleveland St., Poplar Ave. to Watkins St. and North Parkway; plans improving, widening and paving Jackson Ave., Bellevue Blvd. to Watkins St.

Tenn., Rutledge—Grainger County plans gravel surfacing and oiling Lee Highway in county. Address County Comms.

Tex., Alamo—J. G. Cox, Alamo, advises will be no paving contract awarded Feb. 25 in Alamo. Lately noted bids Feb. 25.

Tex., Abilene—Taylor County, Tom K. Eplen, County Judge, plans 1.621 mi. high-type pavement, Highway No. 1, Bankhead Highway, Trent to Nolan County line, estimated cost \$42,800; L. C. McCanlies, Res. Engr.

Tex., Batesville—Zavalla County, N. H. Hunt, County Judge, plans three roads: 8 mi. grading, bridges and gravel surface, Highway No. 55, north from point about 8 mi. from Dimmitt County line, estimated cost \$29,000; 4.94 mi. grading, bridges and gravel surfacing, Highway No. 55, Uvalde-La Pryor road, south from Uvalde County line, estimated cost \$27,000; 8 mi. grading, bridges and gravel surfacing, Highway No.

55, north from La Pryor, estimated cost \$30,000; G. M. Jowers, County Engr.

Tex., Beaumont—City, Ollie J. Bloyd, Mgr., receives bids soon to pave 25 streets; for 72-in. sewer line through south end of city.

Tex., Brownsville—Cameron County, Oscar C. Dancy, County Judge, plans improving Point Isabel-Barreda road and Military Highway west from Brownsville.

Tex., Carthage—Panola County, J. G. Strong, County Judge, plans expending about \$136,000 for 2.2 mi. concrete paving in city of Carthage; D. E. Martin, County Engr.

Tex., Columbus—Colorado County Comms. Court, L. F. Baar, Highway Official, Div. No. 13, plans 2½ mi. tarvia topping on roads in Eagle Lake, Columbus and Weimar.

Tex., Corpus Christi—City, P. G. Levenskiold, Mayor, receives bids March 5 to pave Water St., Dan Reid to Twelfth, and portion of Twelfth to pavement of Timon Blvd.; H. Levinson, City Engr.*

Tex., Corsicana—Navarro County, Warren Hicks, Judge, plans enlarging Road Dist. No. 1 by including Richland and Eureka; building 18 ft. concrete highway.

Tex., Corsicana—City plans expending about \$200,000 for 35½ blocks street paving, including Spruce, Pine, Oak; C. C. Christian, Engr.

Tex., Cotulla—La Salle County Comms. plan improving 3 roads totaling about 40 mi.: Hard paving missing link on Meridian Highway; hard surfaced road east from Cotulla; 6 mi. paving between Artesia, Wells and Dimmitt County line; cost about \$1,000,000; Van B. Harris, County Engr. See Financial News—Bond Issues Proposed.

Tex., Edinburg—Hidalgo County, A. W. Cameron, County Judge, plans road building, cost \$6,000,000. See Financial News—Bond Issues Proposed.

Tex., Falfurrias—Brooks County, J. A. Brooks, County Judge, receives bids soon for .18 mi. highway on Rice St., Falfurrias, connecting Highways Nos. 12 and 16.

Tex., Fort Stockton—Pecos County Comms. plan hard surfacing roads into Fort Stockton, cost about \$1,000,000; John Stovall, County Engr.

Tex., Fort Worth—Tarrant County, S. D. Shannon, County Judge, plans two roads: 4.24 mi. grading and drainage structures, Highway No. 2, Fort Worth-Cleburne road, Fort Worth to Johnson County line, estimated cost \$25,600; 2.8 mi. brick, Highway No. 1, Bankhead Highway, from Arlington Heights, west, estimated cost \$150,000; D. A. Davis, County Engr.

Tex., Fort Worth—Tarrant County Comms. plan improving about 3 mi. Camp Bowie Blvd., west of Fort Worth to Weatherford; cost \$112,000; S. D. Shannon, County Judge.

Tex., Galveston—City, Anne C. Kelley, Sec., receiving bids to pave 5 streets, including 21st, 14th St.; drain Ave. K and Alley, 10th to 15th; estimated cost \$200,000; G. A. Holt, Jr., City Engr.

Tex., Galveston—Galveston County, E. B. Holman, County Judge, plans 3.33 mi. concrete, Highway No. 6, Galveston-Houston Highway, North La Marque Crossing to South La Marque Crossing; estimated cost, \$175,400; C. C. Washington, County Engr.

Tex., Goliad—Goliad County Comms. plan about 30 mi. hard paving Highway No. 12 through county; 110 mi. rock asphalt topped main highways, grading lateral roads. See Financial News—Bond Issues Proposed.

Tex., Houston—Harris County receives bids Mar. 14 for 5 mi. grading, drainage structures and Bates Section concrete, asphaltic or brick surface, on concrete slab, Houston Ace cut-off road, city limits to Little York, estimated cost \$175,000; Howe & Wise, Engrs., 816 First National Bank Bldg.

Tex., Merkel—City, N. D. Cobbs, Mayor, plans expending \$35,000 for permanent street paving, and \$40,000 for water works; Hawley & Roberts, Engrs., 403 Cotton Exchange Bldg., Fort Worth and Lubbock, preparing plans.

Tex., Matador—Motley County Comms. Court, J. Floyd Jordan, County Judge plans 3 roads, cost \$250,000. See Financial News—Bond Issues Proposed.*

Tex., Midland—City, B. Frank Haag, Mayor, receives bids Mar. 10 for 34,442 sq. yd. concrete, brick, Uvalde rock asphalt, Warrenite bitulithic or Willite pavement, 7490 lin. ft. combined concrete curb and gutter, 2503 lin. ft. separate 18-in. gutter, 1315 lin. ft. concrete header; J. M. Gilmore, Sec.

Tex., Olney—Young County, W. F. Parsley, County Judge, receives bids about March 18, tentative date, for 12.61 mi. grad-

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ing and bridges, Highway No. 67, Graham to Stephens County line; Guy R. Johnston, County Engr.

Tex., Panhandle—City plans 22 blocks additional paving. Address City Clk.

Tex., San Antonio—City, John W. Tobin, Mayor, plans widening, grading, leveling, paving, etc., Hildebrandt St., through to Carey Ave.; estimated cost \$35,000; I. Ewig, City Engr.

Tex., San Antonio—City, John W. Tobin, Mayor, receives bids Mar. 7 for grading, hard foundation, curbs, 2-in. rock asphalt or 2-in. bitulithic topping on about 18 blocks; estimated cost \$30,000; I. Ewig, City Engr.

Tex., Tyler—Smith County Highway Comm. and Comms. Court plan 2 roads; 8 mi. from Winona to Big Sandy; from Tyler to Silver Lake, through Mount Sylvan, Carroll, Garden Valley and Jamestown.

Tex., Wichita Falls—Wichita County Comms., E. P. Walsh, County Auditor, plan hard paving on main unpaved highways through county; estimated cost \$1,750,000; J. M. Isbell, County Engr.; E. W. Nicholson, County Judge. See Financial News—Bond Issues Proposed.

Tex., Wichita Falls—City, W. E. McBroom, Clk., plans paving Fourth, Sixth, Tenth Sts.; plans receiving bids to pave Brook St., Seventh to Eighth.

Virginia—State Highway Comm., H. G. Shirley, Chmn., Richmond, receives bids Mar. 17 for 6 roads and 2 bridges: Project S-395-B, 1.6 mi. grade and drain; F-171-A, 3.89 mi. concrete; F-458-A, 5.26 mi. concrete; F-467-B, 6.5 mi. concrete; F-467-C, bridge over Meherrin River; F-471-B, 4.7 mi. concrete; F-471-C, bridge over Roanoke River; F-471-D, 5.16 mi. concrete; plans on file.

Va., Luray—Page County Board of Supvrs. plan resurfacing and tarring 4 mi. county roads in Luray and Marksville Dist.

Va., Petersburg—City considering widening East Bank St. 20 ft., Main to Blandford; pave Main St., East Bank to Bollingbrook, and East Bank to Wythe; pave Bollingbrook St.; J. Gordon Bohannon, Mayor; Dr. W. F. Drewry, City Mgr.

Va., Suffolk—Nansemond County Board of Supvrs. received low bid from Ford & Harvey Co., Lynchburg, at \$100,675, for road in Sleepy Hole Dist.*

W. Va., Huntington—City Comms., H. L. Fielder, Clk., plan sheet asphalt resurfacing, Ninth, Tenth and Eleventh St.; A. B. Maupin, City Engr.

Contracts Awarded

Ala., Bessemer—City, J. M. Scott, Clk., let contract to Jones Paving Co., at \$45,993, to pave Third St., Eighteenth to Ninth St.

Ala., Birmingham—City Comm. let contracts at \$117,530 to pave eight streets, including Sixth Ave., Twenty-fourth St., Ensley; Southern Roads Co., 104 N. Seventeenth St.; Morgan-Hill Paving Co., Woodward Bldg.; Dunn Construction Co., Chamber of Commerce Bldg.; Independent Paving Co., American Trust Bldg.; Hemming & Bragan; Wood-Rucker Construction Co.

Ark., Little Rock—M. D. L. Cook, Home Ins. Bldg., has contract at \$18,016 for 8 blocks concrete paving, including curbing, gutters, sewers.

Fla., Pensacola—Penton-Mathis Construction Co., Paxton, Ala., let contract to Orange State Engineering & Dredging Co. for half grading work on Scenic Highway.*

Ga., Atlanta—City, I. M. Ragsdale, Mayor, let contract to Meador Construction Co., 10 W. Harris St., for sidewalks; Bishop Construction Co., concrete gutters; Pine Mountain Granite Co., Atlanta Trust Bldg., granite curbing laid; R. E. Suggs, Healey Bldg., granite curb, straight and curved; Meador Co., hexagon tiles.

Kentucky—State Highway Comm., Frankfort, let contracts for 6 roads: Clinton County, 5.415 mi. grade and drain Albany-Tennessee State line, R. H. Bolling, Norton, Va., \$59,766; Mercer County, 6.675 mi. bituminous macadam, Harrodsburg-Lawrenceburg, Ben W. Gorham & Co., Lexington, \$144,101; Nicholas County, 2.55 mi. water-bound macadam, Carlisle-Morefield, Jessamine Construction Co., Nicholasville, \$48,109; Pike County, 8.108 mi. grade and drain Pikeville-Whitesburg, Southerland Bros., Clinwood, Va., \$118,124; Scott County, 7.068 mi. reinforced concrete, Georgetown-Williamstown, J. F. Stambaugh, Ada, Ohio, \$185,162; Wayne County, 6.250 mi. grade and drain, Monticello-Albany, R. H. Bolling, \$88,852.*

La., Jena—Louisiana Highway Comm., Baton Rouge, let contract to J. J. Beesom, Fullerton, at \$36,951, for 7.454 mi., Jena-Nebo-Rogers Highway, La Salle Parish.*

Miss., Picayune—Board of Aldermen, H. K. McKee, City Clk., let contract to Merrill Engineering Co., Lamar Bldg., Jackson, at \$17,360, for 8000 sq. yd. 40-ft. Bates type Portland cement paving, curbing and grading.*

Miss., Vicksburg—Newsom Brothers, Goss, Miss., have contract at \$19,815, to improve Fisher's Ferry and Baldwin's Ferry roads.

Miss., Vicksburg—Warren County Board of Supvrs. let contract to V. T. Zollinger, Vicksburg, at \$49,352, for asphaltic concrete paving, National Cemetery Road.*

Mo., Clinton—City let contract to Reed & Wheelock at \$12,866 to pave N. Third, Water and West Jefferson St. Address City Clk.

N. C., Louisburg—Franklin County Comms. let contract to W. W. Hines to grade section road, Rocky Cross, Nash County, to Strickland's old mill, Wake County.

Oklahoma—State Highway Comm., let contracts for 4 roads and 12 bridges: Kingfisher County, overhead crossing, James Yeokum & Lackey, \$14,762; Payne County, 5 bridges, Goldy & Epperson, \$48,973; Logan County, 13.44 mi. grading, drainage and structures, Blackburn Construction Co., \$63,396; 2 bridges, James Yeokum & Lackey, \$19,981; Payne County, 15.571 mi. grading, drainage and structures, Blackburn Construction Co., \$116,987; Grant County, 13.829 mi. grading, drainage and structures, B. J. & L. Paving Co., \$41,354; 2 bridges, McNeill & Wells, \$16,712; Pawnee County, 5.21 mi. grading, drainage and structures; Altman & Rodgers Construction Co., \$37,283; Jackson & Tillman Counties, bridge, Yeokum & Lackey, \$18,108; Payne County, bridge, Pioneer Construction Co., \$135,758.*

Okla., Blackwell—City, Dwight Randall, Clk., let contract to O. T. Tyler, Blackwell, at \$37,109, to pave E. Lincoln Ave. with brick, South Main to E St.*

Okla., Wewoka—City let contract to Hansen & Pearce, Oklahoma City, at \$124,443, for paving in Dist. No. 8.

S. C., Charleston—Isle of Palms, Inc., Chas. R. Allen, Pres., 16 Vendue Range, let contract to A. L. Welch, for 8000 ft. 27-ft. asphalt surface ocean blvd. from Breach Inlet to pavilion, on first line sand dunes, about 10½ ft. above low water.

S. C., Greenville—Greenville County Comms. let contract to Slaterry & Henry, Capers Bldg., Greenville, for 8.5 mi. 18-ft. concrete road from present pavement toward North Carolina line; approximate cost \$260,000.

Tex., Corsicana—City Comm. let contract to F. P. McElwraith, Corsicana, for 2000 sq. yds. reinforced concrete street paving in Oakwood Cemetery.

Tex., Dallas—Fuller Construction Co., 1259 Republic Bank Bldg., has contract to furnish 125 tons asphalt mixture in place on Elm St. at \$14.35 per ton; E. A. Kingsley, City Engr.; M. G. James, City Sec.

Tex., Houston—City, O. F. Holcombe, Mayor, let contract to A. M. Arnold & Co., Summer and Elder Sts., at \$130,000 to grade Navigation Blvd., H. B. & T. R. to 69th St. Bridge; at \$14,000 to pave Commerce St., Buffalo to Hamilton.

Tex., Lubbock—Lubbock County, Chas. Nordyke, County Judge, let contract to W. P. Hudman, at \$23,992, for grading and drainage structures, Highway No. 53, Lubbock to county line toward Brownfield.*

Tex., San Benito—City, Scott Brown, Mayor, let contract to Harris, Spaulding & Ranney, at \$146,222, for 48,600 yds. 6-in. reinforced concrete paving; Dodds, Wedegartner, at \$108,948, for 32,400 yds. 6-in. reinforced concrete paving; both San Benito; Bruce Gentry, Engr.

Sewer Construction

Sewer construction in LAND DEVELOPMENT projects involves the expenditure of large sums of money. Under that classification details of these improvements are reported.

Ala., Eufaula—City, H. H. Conner, Mayor, receives bids Mar. 15 for sanitary sewers. See Want Section—Bids Asked.

Ala., Sheffield—City Comm., A. J. Roulhac, reported, considering sewer extension; R. A. Chapman, City Engr.

Ark., Little Rock—See Roads, Streets, Paving.

Ark., Searcy—Dickinson & White, Engrs.,

608 Boyle Bldg., Little Rock, reported making surveys for sewage disposal plant, cost \$80,000.

D. C., Washington—District Comms. let following contract for sewers: Mt. Pleasant Relief, Section 2, W. F. Brenizer Co., 101 New York Ave. N. E., at \$16,150; 16th St. service, Jos. P. Maher, 4324 15th St. N. W., at \$2053; Georgia Ave. service sewer, Wm. A. Pate, Jr., Rockville, Md., at \$6341; J. B. Gordon, Sanitary Engr.

Fla., Hollywood—See Roads, Streets, Paving.

Fla., Jacksonville—City Commn. plans storm and sanitary sewers. See Want Section—Bids Asked.

Fla., Tampa—City Comm. receives bids Mar. 15 for sanitary sewers. See Want Section—Bids Asked.

Ga., Atlanta—Sewer Committee of City Council approved plans for sewer extension. Ky., Fort Thomas—City receives bids March 14 for sewers. See Want Section—Bids Asked.

La., Marksville—Town, reported, let contract to W. H. O'Toole Construction Co., Alexandria, for sewers; Henry A. Mentz, Const. Engr., Hammond.*

Md., Baltimore—Board of Awards receives bids March 9 for storm and sanitary drains in miscellaneous sewer districts. See Want Section—Bids Asked.

Md., Baltimore—See Roads, Streets, Paving.

Miss., Picayune—See Water Works.

Mo., Campbell—City, W. D. Beasley, Mayor, receives bids March 10 for sanitary sewers and disposal plant. See Want Section—Bids Asked.

Mo., St. Louis—Board of Public Service receives bids March 8 for Section A, Western Mill Creek Public Relief sewers. See Want Section—Bids Asked.

Okla., Longdale—City reported considering sewer system and sewage disposal plant. Address The Mayor.

Okla., Oklahoma City—City reported plans vitrified clay sewers in Lincoln Terrace and West Lawn Addition; B. M. Hart, Engr.

Okla., Tulsa—City, reported, expend \$2,000,000 during 1927 for sewers. Address The Mayor.

Tenn., Alton Park, Branch Chattanooga—Town of Alton Park, S. O. Kinsey, Mayor, plans completing sanitary and storm sewers. See Financial News—Bond Issues Proposed.

Tenn., Nashville—City, Hilary E. Howse, Mayor, receives bids March 8 for trunk and lateral sanitary sewers. See Want Section—Bids Asked.

Tenn., Paris—City let contract to Emil S. Hartig, Evansville, Ind., at \$12,253 for sewer system; 6900 ft. of 8-in., 500 ft. 10-in. v. s. sewer lines, 90 ft. cast iron sewer lines, 160 ft. cast iron sewer lines; septic tanks, 40x40 ft., reinforced concrete; V. V. Long & Co., Engrs., Bennie Dillon Bldg., Nashville.*

Tenn., South Fulton, (mail, Fulton, Ky.)—City, S. A. McDade, Mayor, let contract to W. G. Traver Co., Decatur, Ill., at \$35,501, for sewer system; install 38,000 ft. pipe, tank, man holes, flush tank and inverted syphon; Klyce & Harrub, Engrs., Fourth & First Bldg., Nashville.*

Tex., Amarillo—City reported receives bids in April for sewers, cost \$200,000; H. B. Hawley, Engr., 403 Cotton Exchange Bldg., Fort Worth.*

Tex., Beaumont—See Roads, Streets, Paving.

Tex., Dalhart—City plans extension of sewer system and enlarging disposal plant. Address The Mayor.

Tex., Mercedes—City plans sanitary sewers and disposal plant at new townsite Santa Rosa; H. E. Bennett, Engr.

Tex., Toyahvale—See Land Development.

Tex., Valley Mills—City defeated \$40,000 bond issue for sewers; may call new election; Koch & Fowler, Engrs., 310 Fidelity Bldg., Dallas.

Street Railways

Tex., Houston—Houston Electric Co. reported plans \$1,500,000 improvements in transportation service; install bus lines, extending service, purchasing additional equipment.

Telephone Systems

D. C., Washington—Chesapeake & Potomac Telephone Co., Charles E. Robinson, Ch. Engr., reported, expend approximately \$3,700,000 for 1927, covering plant extensions and renewals in District.

In writing to parties mentioned in this department it will be of advantage to all concerned if the Manufacturers Record is mentioned.

Fla., Palatka—Southern Bell Telephone Co., A. L. Joyner, Dist. Mgr., reported expend \$25,000 to \$30,000 on additional equipment; replace old wires with new and provide increased facilities for service.

Ky., Auburn—Moore Telephone Co., capital \$30,000, incorporated; James N. Cox, C. H. Moore.

Ky., Melber—Melber Telephone Co., capital \$25,000, incorporated; Henry E. Meyer, E. E. Davis.

Md., Baltimore—Chesapeake & Potomac Telephone Co., 5 Light St., reported expend \$155,000 for new central office to serve Lansdowne, Arbutus, Halethorpe and adjacent territory.

N. C., Asheville—Southern Bell Telephone and Telegraph Co. main office Atlanta, Ga., reported acquired 113x240-ft. site on N. French Broad Ave.; R. N. Pfaff, Dist. Mgr.

N. C., Hamlet—Southern Bell Telephone & Telegraph Co. main office Atlanta, Ga., expend \$15,000 to \$25,000 on plant improvements.

Tex., Harlingen—Southwestern Bell Telephone Co., main office, St. Louis, Mo., reported let contract to Andrew Ness, Brownsville, for 2-story, 53x46-ft. building, brick, tile and stucco, reinforced concrete; concrete and tile floors, metal lath and plaster; marble treads and risers; wiring to Braden-Hudson-Wangler Co., 302 E. Commerce St., San Antonio; total cost \$40,000.*

Textile Mills

Ga., Atlanta—Supt. Federal Prison, reported, plans \$14,000 addition to textile mill, foundation for which has been completed; reinforced concrete and brick.

Ga., Gainesville—Smith & Williams Co., Inc., Red Rock Bldg., Atlanta, advises company has contract for Gainesville Cotton Mills addition, 96x130 ft., 5 stories, with toilet and elevator tower 5 stories high; mill construction, cast iron columns, steel I-beams and brick walls; following contracts let: Structural steel, Carolina Steel & Iron Co., Elm St.; miscellaneous iron, Greenville Steel & Foundry Co., 120 Markley St., Greenville, S. C.; millwork, Willingham Tift Lumber Co., 866 Murphy Ave. S. W., Atlanta; cast iron columns, Paul Wright Co., Brown-Marx Bldg., Birmingham, Ala.*

Ga., Macon—Bibb Mfg. Co., W. D. Anderson, Pres., reported altering and improving Mills No. 1 and No. 2; install electrical equipment; cost \$38,000.

N. C., Durham—Golden Belt Manufacturing Co., G. W. Hundley, Pres., advises: "Contract let to Potter & Shackelford, Allen Bldg., Greenville, S. C., for new buildings; all materials to be purchased by them; orders have been placed by us for all equipment for these buildings."

N. C., Greensboro—Greensboro Silk Hosiery Co., incorporated; F. Osborne Pfingst, 300 Chestnut St.; Frank E. Curran, both Philadelphia, Pa.; reported construct silk hosiery mill on W. Lee St. with floor area 20,000 sq. ft.; first unit erected under direction of Wm. F. Lotz, Oxford Bank Bldg., Philadelphia, Pa.; second unit, having floor area of 20,000 sq. yds., will be erected later in year; mill type construction, 1 story, production 1600 prs. hosiery per week; cost of building and materials \$500,000.

N. C., Ronda—Wilco Mills, Inc., capital \$200,000, chartered; T. W. Church; manufacture cloth.

S. C., Ninety-Six—Fliske-Carter Construction Co., Greenville, advises company has now under construction an extension to Ninety-Six Cotton Mills, 130x267 ft., 4 stories, standard mill construction (brick, steel and timber), steel sash and tar and gravel roof; J. A. Piper Roofing Co., 116 W. Court St., has contract for roofing and sheet metal work; Edens & Moon, 108 Pendleton St., for plumbing, both Greenville; have also started extension of power plant, consisting of boiler room, 37x41 ft., and new turbine room 31x52 ft., same construction as mill extension.*

S. C., Union—Sidney M. Edelstein, 136 Madison Ave., New York, advises early in April will remove silk and mill from Brooklyn, N. Y.

Tenn., Knoxville—Holston Manufacturing Co. will erect warehouse, Ninth Ave. and Southern Ry.; brick, 50x200 ft., 1 story; cost \$12,000.

Tenn., Morristown—Chamber of Commerce, reported, interested in establishment of sweater mill.

Tex., Port Arthur—Chamber of Commerce negotiating with textile mill planning to locate here.

Water Works

Details of water works improvements in connection with the many LAND DEVELOPMENT operations will be found under that classification.

Ark., Marianna—Board of Commrs. Water Works Improvement District No. 2, O. C. Sutton, Pres., plans water works improvements. See Want Section—Bids Asked.

Fla., Pensacola—Gray Artesian Well Co. has contract for drilling well at water works.

Fla., Vero Beach—City receives bids March 17 for water main extension. See Want Section—Bids Asked.

Ga., Sparta—Tenth District Agricultural and Mechanical School, reported, installing water works system with electric motor-driven pump.

Ky., Hopkinsville—Kentucky-Tennessee Light and Power Co., Bowling Green, subsidiary of Associated Gas and Electric Co., New York, reported, acquired Hopkinsville Water Company.

La., Hammond—City, Mayor Carter, plans water works improvements.

La., Many—City voted \$50,000 water works bonds. Address The Mayor.*

Md., Easton—Town, Richard Goldsborough, Clk., plans extension to water system; votes on bonds.

Md., Westernport—City plans water works improvements. Address The Mayor.

Miss., Picayune—City plans installing sewer and water works; may vote on \$225,000 bonds; Henry A. Mentz, Consit. Engr., Hammond, La.

Mo., St. Charles—City will probably open bids about May 15 for 4,000,000 gal. per day filtration plant, cost \$47,500; preliminary plans delivered; Edw. Flad & Co., Consit. Engrs., 916 Chemical Bldg., St. Louis.*

Mo., Versailles—City votes April 15 on bonds for extending water lines to Edge-dale Addition. Address The Mayor.

N. C., Spindale—Town receives bids soon for 1,000,000 gal. filter plant; The Carolina Engineering Co., 917 Johnston Bldg., Charlotte, preparing plans and specifications and will supervise construction.

Okla., Chickasha—City plans water works improvements; Robt. O. Bradley & Co., Engrs.*

Okla., Enid—City, R. T. Williams, Clk., reported let contract to Will F. Plummer, Union Nat. Bank Bldg., Springfield, Mo., for water works extensions.

Tenn., Ridgely—See Electric Light and Power Plants.

Tex., Markel—See Roads, Streets, Paving.

Tex., Snyder—City receives bids March 8 for completing water works and equipment. See Want Section—Bids Asked.

Tex., Sweetwater—Terrell Bartlett Engineers, Calcasieu Bldg., San Antonio, are engineers for \$300,000 water works improvements.

Tex., Toyahvale—See Land Development.

Tex., Wichita Falls—City, R. E. Shepherd, Mayor, reported plans establishing 500,000-gal. elevated water tank, cost \$40,000; Black & Veatch, Consit. Engrs., Mutual Bldg., Kansas City, Mo.

Va., Clarendon—Board of Supervisors, Arlington County, receives bids March 7 for cast iron water pipe, etc. See Want Section—Bids Asked.

Woodworking Plants

Fla., Auburndale—N. W. Hart of Hart Furniture Co., reported acquired complete plant of Auburndale Furniture Co.; will operate; J. L. Smith, Supt.

Fla., Palatka—Tubs, etc.—Putnam Wood Products Co., W. M. Goethe, Sec., Box 511, advises: "Have taken over Florida Woodware Co. (which was burned in December, 1926); rebuilding plant and constructing new dry kilns, warehouse and making other changes; will begin operation by April 1; weekly output from 10 to 12 cars lard tubs; later contemplates installing additional machinery, increasing capacity.*

La., Shreveport—Hardwood Handle Mills, Inc., capital \$30,000, chartered; Geo. B. Boh, 1704 Louisiana Ave.

Miss., Grenada—Boone Cooperage Co., leased site, establish plant, install machinery to manufacture slack barrel staves.

Mo., Morehouse—St. Clair Cooperage Co.,

capital \$10,000, incorporated; Frank G. Zillmer.

Mo., St. Louis—Pioneer Cooperage Co., 2212 De Kalb Ave., has permit for alterations to 1-story shed; cost \$10,000; brick; Fruin-Colnon Contracting Co., 502 Merchants Laclede Bldg.

Mo., St. Louis—Furniture—Landau Manufacturing Co., capital \$100,000, incorporated; Robt. Dierkes, 4872 Sacramento St.

Okla., Tulsa—Millwork—Southern Mill & Manufacturing Co., Walter Ahrens, Pres., 1645 E. Sixth St., plans new building near Troost Ave.; increasing capacity, adding new lines of manufacture.

Tex., Wichita Falls—Bolton Furniture Co., Inc., 807 Tenth St., increased capital, \$20,000 to \$30,000.

FIRE DAMAGE

Ark., Benton—Commissary Department of E. A. Parker Stave Co.; loss \$25,000.

Ark., Hollywood—Ellis Sawmill Co.'s yards; loss \$45,000.

Ga., Atlanta—M. M. Russ dry good store, 778 Marietta St.; loss \$20,000.

Ga., Augusta—Portion of plant of Clausen's Bakery, loss \$20,000.

Ga., Hawkinsville—Building occupied by Hawkinsville Dispatch and News; Harvard Filling Station; Community Theater, Hawkinsville Furniture Co.; loss \$60,000.

Ga., Sandersville—Red Bird Lumber Co.'s planing mill and dry kilns, loss \$50,000; Byrd B. Lovett, Pres.

Ky., Dry Ridge—Fourteen buildings, including Charlesbad Springs Hotel, Farmers' Bank & Equity Bldg., post office building; loss \$200,000.

Ky., Eminence—Dr. Maurice Bell's residence; loss \$10,000.

La., Jennings—Walker Building, owned by estate of Mrs. J. L. Montgomery, San Antonio, Texas, occupied by D. J. Castille department store and offices; loss \$60,000.

La., Olla—F. B. Crick's pressing shop, J. P. Harris' mercantile house; loss \$15,000.

Md., Overlea—Girls' building at Maryland School for the Blind, John F. Bledsoe, Supt.; loss \$25,000.

Miss., Dumas—Bob Burton's residence near Dumas.

Miss., Tupelo—Jos. Davidson's residence, Willis Heights.

Miss., Lake—Stores owned by C. E. Noblin, K. D. Hellen and Mrs. Blakely.

Miss., New Hebron—A. C. Berry's residence, Hebron, near New Hebron.

Miss., Yazoo City—The Whittaker Garage, Commercial St.

N. C., High Rock—Harris and Teague Cafe, High Rock Bargain House and barber shop, all owned by H. H. Hardy, Denton; loss \$10,000.

N. C., Mt. Olive—Garage building owned by H. F. Lee.

N. C., Statesville—Statesville Furniture Co.'s plant No. 2, loss \$300,000; J. G. Shelton, Sec.

N. C., Winston-Salem—Residences of E. J. George and Mrs. J. M. George; loss \$7500.

Okla., Shawnee—Shawnee Country Club; loss \$10,000.

S. C., Calhoun Falls—Stores of T. J. Martin and cafe of Mr. McGarrity.

Tex., Cleburne—Yale Theater building; address The Proprietor.

Tex., Floydada—L. A. Marshall's grain elevator; loss \$27,000.

Tex., Llano—Will Gray's residence.

Tex., Longview—Ed Nelson's residence; loss \$6000.

Va., Petersburg—Appomattox Box Shook Co.'s plant in Dinwiddie County; loss \$100,000.

Tex., Pilot Point—Ratchford Dry Goods Co. store; loss \$10,000.

Va., Richmond—Academy of Music; loss \$150,000.

W. Va., Paden City—Paul Wismath's glass factory, loss \$100,000.

W. Va., Wheeling—L. S. Jenkins' grocery store and apartment, 209 Valley View Ave., Pleasanton; loss \$30,000.

In writing to parties mentioned in this department it will be of advantage to all concerned if the Manufacturers Record is mentioned.

BUILDING NEWS

BUILDINGS PROPOSED

Association and Fraternal

Ala., Moundsville—Ancient Free and Accepted Masons plan temple.

Fla., Clearwater—Young Men's Christian Assn. raising \$100,000 for building.

Fla., Fort Lauderdale—William C. Morris Post, American Legion, plans \$35,000 clubhouse with attached athletic field; considering plans of 4 architects.

Ga., Blackshear—Blackshear Fraternal Assn., W. N. Brown, member, applied for charter; erect \$15,000 building, site Masonic Hall; 2 stories, brick; Masons and Knights of Pythias on second floor.

Ga., Hoboken—Ancient Free and Accepted Masons, R. R. Kelley, Worshipful Master, rebuild structure lately noted burned; wood frame, 2 stories, 30x50 ft., wood floors, shingle roof; stores and lodge quarters.*

La., New Orleans—Grand Lodge, Knights of Pythias, receives bids March 10 for remodeling and addition to brick building, Carondelet St. near Howard Ave.; steel, brick, reinforced concrete and timber, 2 stories, new section about 113x50 ft., wood floors, reinforced concrete foundation; Diboll & Owen, Ltd., Archts.-Engrs., Interstate Bank Bldg.; following contractors estimating: J. A. Pettit & Sons, Inc., Godechaux Bldg.; Lionel F. Favret, Louisiana Bldg.; H. W. Bond & Bro., 1019 Constantinople St.; Thos. H. Brockman, Hibernia Bldg.; R. P. Farnsworth & Co., Canal-Commercial Bldg.; Jos. Fromherz, Inc., Title-Guarantee Bldg.; O. M. Gwin Construction Co., Union Indemnity Bldg.; J. V. & R. T. Burkes, Carondelet Bldg.; Geary-Oakes Co., Q. & C. Bldg.; Chas. Gilbert, Balter Bldg.; C. A. D. Bayley & Co., Interstate Bank Bldg.; Gervais F. Favrot, Balter Bldg.*

Miss., Yazoo City—Roy Lammons Post, American Legion, plans clubhouse.

Okla., Muskogee—James F. Smith Post, American Legion, E. H. Shoults, member, Bldg. Comm., plans clubhouse.

Tex., Beaumont—Young Men's Christian Assn., Howard W. Gardner, member, Special Bldg. Fund Comm., plans \$300,000 building; 4 or 5 stories, 2 gymnasiums, dormitory accommodate 150, etc.; work start in Fall, 1928.

Tex., Coleman—Ray Post No. 213, American Legion, plans \$25,000 building; 2 stories; stores on first floor, clubrooms above.

Tex., Kerrville—Young Men's Christian Assn., E. D. Frederick, Director, Boys' Work, San Antonio, plans summer camp for boys, South Fork, Guadalupe River, near Kerrville; accommodate 50.

Tex., Wichita Falls—Lodge No. 635, A. F. & A. M., Burton A. Stayton, Chm., Bldg. Comm., having plans drawn by Voelcker & Dixon, 4 Kahn Bldg., for \$75,000 addition to temple; reinforced concrete, brick, stone, steel, cooling and ventilating systems.*

Bank and Office

Ala., Ensley—Birmingham-Ensley Land Co., Inc., 704 19th St., erect 2-story office building, 19th St. and Avenue H, after plans by D. O. Whildin, 515 N. 21st St., Birmingham; white stone or similar material, not brick, site 50x100 ft.; foundation probably carry five stories.*

Fla., Lake Worth—Jos. F. Reilly, care of Rita Realty Co., Citizens Bank Bldg., West Palm Beach, plans 2-story building, Lake Ave. and K St., during Summer.

La., Monroe—Mrs. P. P. Bernhardt erect \$350,000 to \$400,000 office building, Desiard and Second Sts.; fireproof, steel, brick, cast stone trim, 6 or 8 stories, pile foundation, steel sash, steam heat, 3 electric passenger elevators; J. W. Smith, Archt., Onachita Bank Bldg., have plans ready for bids about 60 days.

Okla., Tulsa—Exchange Trust Co. purchased Harwell Building, Fourth St. and Boston Ave., and will use property in connection with site for proposed \$3,000,000 building; 135x60 ft. with L-shaped extension on lot south of present structure providing 300-ft. lobby; height not determined, changing plans as previously announced for \$2,000,000, 24-story structure; Weary & Alford Co., Archts.-Engrs., 1923 Calumet Ave., Chicago.*

Texas—Henry Hagelstein Land Co. erect office building at new city of Winter Haven,

on S. A. U. & G. R. R., between Carrizo Springs and Crystal City; C. Blevins erecting residence at Winter Haven.

Tex., Midland—Dr. John B. Thomas may open bids about 30 days for fireproof office building; cost \$125,000, reinforced concrete, 5 stories, 45x100 ft., concrete foundation. Address David S. Castle Co., Archt., Abilene. See Want Section—Building Materials and Equipment.*

Tex., San Antonio—Louis W. Lipscomb, Frost Bank Bldg., purchased 3-story Nueces Hotel; after May 1 remodel first floor for offices.

Va., Richmond—Federal Reserve Bank, Geo. J. Seay, Pres., probably tear down and rebuild 2 upper floors of building, damaged by Academy of Music fire.

Churches

Ala., Talladega—Protestant Episcopal Church, J. A. Bingham, Sec., erect \$30,000 church and Sunday school, North Ave.; brick and rein. concrete, 1 story., 32x120 ft.; Frank Lockwood, Archt., 119 Adams St., Montgomery.

Ala., Tuscaloosa—First Baptist Church, Rev. J. P. Boone, Pastor, plans Sunday school building.

Fla., Coral Gables—Dougherty & Gardner, 507 Cotton States Building, Nashville, Tenn., drawing plans for \$300,000 church.

Fla., Gainesville—First Christian Church repair structure damaged by fire. Address The Pastor.

Fla., Miami—Temple Israel Congregation opens bids about March 15 for fireproof synagogue; steel, reinforced concrete, tile and stucco, 2 stories equivalent to 3 stories, 70x140 ft., tile and composition floors, composition roof, cost \$150,000; E. L. Robertson & L. R. Patterson, Archts., Calumet Bldg.; A. Robt. Chanania, Realty Board Bldg., and Ralph J. Friedberg, Asso. Archts. See Want Section—Building Materials and Equipment.*

Ga., Albany—First Methodist Church, Rev. Osgood F. Cook, Pastor, plans church and Sunday school.

Ga., Atlanta—Mount Zion Second Baptist Church erect \$25,000 building; brick veneer, 1 story and basement. Address The Pastor.

Ky., Lexington—Porter Memorial Baptist Church, Rev. A. L. Goodrich, Pastor, 730 S. Limestone St., receives bids March 5 for auditorium; cost \$50,000 to \$60,000, brick and steel, 3 stories, seat 600, wood floors, stone foundation; John T. Gillig, Archt., Fayette Bank Bldg. See Want Section—Building Materials and Equipment.*

Ky., Louisville—St. Paul's M. E. Church, South, receives bids March 10 for church and Sunday school; cost \$250,000, 3½ stories, about 185x150 ft., wood floors, concrete foundation, plans by Board of Church Extension, M. E. Church, South; H. M. King, Archt. in charge, 1115 S. Fourth Ave., Louisville, Ky. Address Mr. King.

La., Shreveport—Dunlap Memorial Presbyterian Church plans reinforced concrete, steel and brick church and Sunday school building, Columbia and Creswell Sts.; Jones, Roessle, Olshner & Wiener, Archts., Ardls Bldg.

Miss., Carthage—Methodist Church considers building. Address The Pastor.

Miss., Jackson—Calvary Baptist Church, Rev. H. M. King, Pastor, have plans by R. H. Hunt Co., James Bldg., Chattanooga, Tenn., for \$300,000 building; ready about 60 days; auditorium seat 1400; 3-story Sunday school.*

Miss., Meridian—Salvation Army plans church.

Miss., Ruleville—First Baptist Church, Dr. Geo. H. Jarman, Pastor, receiving bids for brick veneer building; cost \$20,000, 73x44 ft., 1 story and basement, Johns-Manville composition shingle roof, concrete and wood floors; furnishings, equipment, etc., \$5000; Walter R. Nelson, Archt., 833 Shrine Bldg., Memphis, Tenn.*

Miss., Webb—First Baptist Church, Rev. R. A. Eddleman, Pastor, receiving bids for brick building; stone trim, 3 stories and basement, 83x42 ft., composition roof, concrete and wood floors; H. Ray Burks, Archt., 307 Home Ins. Bldg., Little Rock.*

Mo., St. Louis—Albert Meyer, Archt., 1021 Central Nat. Bank Bldg., has plans for church, Jefferson and Palm Sts.; 50x103 ft., stone foundation, concrete floor slab with tile top, tar and gravel roof, composition floors; cost \$15,000; basement as first unit; about ready for bids.

Mo., St. Louis—Tyler Place Presbyterian Church, Rev. L. V. Buschmann, Pastor, 3650 Flad Ave., alter and enlarge building. Spring and Russell Aves., after plans by Oliver J. Popp, 1101 Arcade Bldg.; 1 story and basement, 110x120 ft., new hardwood floors, plastering, steam heating plant, wiring, underpinning; bids in.

N. C., Goldsboro—St. Paul Methodist Church plans addition. Address The Pastor.

Okla., Fairfax—Sacred Heart R. C. Church, erect \$45,000 church and mission; Harold Gilmeno, Archt., Norman.

Okla., Oklahoma City—Central Baptist Church, Rev. E. P. Roe, Pastor, erect building, Washington and Dewey Aves.; change name to Washington Ave. Baptist; J. Dawson Mathews, Archt., 2119 W. 18th St.

S. C., Greenville—Central Baptist Church, T. F. James, Chmn., Bldg. Comm., receives bids March 8 for brick veneer Sunday school; cost \$40,000, 3 stories, accommodate about 1000; Thos. Reid drafted plans.*

S. C., Spartanburg—Southside Baptist Church plans 3-story Sunday school annex; accommodate 1000; new art glass windows, lighting fixtures, etc. in main auditorium.

Tex., Beaumont—Italian Baptist Church, Rev. Leonardo Riscica, Pastor; plans building.

Tex., La Feria—Methodist Church erect Spanish type parsonage; 2 stories, stucco; R. W. Mulhausen & Co., Archts., Harlingen.

Tex., Linden—Methodist Church erect \$15,000 brick and concrete building. Address The Pastor.

Tex., San Antonio—Woodlawn Place M. E. Church, Rev. J. W. Rowland, Pastor, erect \$30,000 church and Sunday school, Woodlawn and Zarzamora Sts.; reinforced concrete and brick 2 stories and basement, 50x80 ft., wood floors, reinforced concrete foundation, asbestos slate roof; Morris & Noonan, Archts.-Engrs., 801-02 Builders Exchange Building.*

Va., Charlottesville—High Street Baptist Church having plans for \$160,000 church, W. Main St., drawn by Herbert L. Cain, Grace Securities Bldg., Richmond; auditorium seat 1100; 68 classrooms, accommodating about 1200.*

Va., Richmond—Church of the Nazarene remodeling old Barton Heights Baptist Church, Rose Ave and Wickham St., for new congregation.

Va., University, Charlottesville—High Street Baptist Church erect \$160,000 building, W. Main St.; auditorium seat 1100; 68 classrooms, accommodating about 1200; drawing plans.

W. Va., Wheeling—St. Michaels R. C. Church, Edgington Lane, Rev. Thos. Larkin, Pastor, having plans drawn by John F. O'Malley, Pawtucket, R. I., for \$700,000 church, school and rectory; \$160,000 school as first unit; fireproof, brick walls, 2 stories and basement, 140x66x36 ft.*

City and County

Ark., Rogers—City plans city hall and auditorium; may vote on bonds. Address City Council.

Ark., Stuttgart—Arkansas County Quorum Court appropriated \$50,000 for courthouse; J. T. Roberts, member, Courthouse Commission.

Ark., Tex., Texarkana—City of Texarkana, Ark., voted \$317,000 bonds, including \$300,000 for city hall; Witt, Seibert & Halsey, Archts.*

D. C., Washington—District Commission, Room 509, District Bldg., receives bids Mar. 8 for public exhibition bldg. for birds, National Zoological Park; 523,000 cu. ft.; proposal forms at Room 427.

Fla., Largo—Pinellas County Board of Commrs., Clearwater, has low bid at \$97,536 from M. D. Walsh & Co. for detention home.*

La., Mansfield—De Soto Parish Police Jury, G. W. Wharton, Sec., receives bids April 6 for repairs to courthouse; plans and specifications from Mr. Wharton.

Md., Easton—Town, Richard Goldsborough, Town Clk., votes March 1 on \$30,000 bonds for municipal building and fire equipment.

Miss., McComb—City, C. E. McMaster, member, Fire Comm., plans fire stations; architect not selected.

Okla., Muskogee—City, Paul N. Williams,

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Mayor, plans \$500,000 courthouse; also city hall-auditorium building; plans bond elections.

Tex., Levelland—Hockley County may vote April 5 on \$150,000 courthouse and jail bonds. Address County Commrs.

Tex., Wichita Falls—Wichita County Board of Commrs., E. W. Nicholson, Judge, plans brick and stone courthouse; may call election on about \$150,000 bonds.

Va., Richmond—City considers enlarging present jail or erecting new building. Address City Council.

Va., Roanoke—City, W. P. Hunter, City Mgr., has low bid from Tinsley Construction Co. for West End curb market; cost \$11,000.

Dwellings

Ala., Birmingham—Dr. Frank Nice, care of Warren, Knight & Davis, Archts., 1503 Empire Bldg., erect brick, hollow tile and stucco residence, Redmont Park; 2 stories, 30x60 ft.

Ala., Decatur—B. C. Dodd plans two dwellings.

Ala., Oxford—D. C. Cooper erect face brick veneer residence; 1 story, 6 rooms, shingle roof, canvas and paper, pine and oak floors, tile bath; Ye Planry, Inc., Archt., 1713½ Live Oak St., Dallas, Tex.

Ark., Batesville—Conway Hale erect brick residence; 2 stories and basement, 57x62 ft., tile roof, oak floors, tile baths, metal gutter, garage; H. Ray Burks, Archt., 307 Home Ins. Bld., Little Rock.

Ark., Camden—J. C. Crimer erect residence, Lyons St., Washington Heights.

Ark., Fort Smith—First M. E. Church, South, Rev. Geo. W. Davis, Pastor, erect \$12,500 parsonage and garage and servants' quarters; brick veneer, 2 stories, 32x50 ft., composition shingle roof, tile baths, metal lath, steam heat; Haralson & Nelson, Archts., Merchants Nat. Bank Bldg.

Ark., Hot Springs National Park—H. A. Wheatley, 602 Third St., erect wide siding residence, S. Second St.; 1 story, 26x32 ft., composition roof, oak and pine floors, garage; J. G. Horn, Archt., 827½ Central Ave.; bids in.

Ark., Pine Bluff—A. G. Whidden erect stucco residence; 2 stories and basement, 7 rooms, composition roof, oak floors, tile bath; Tom Hardin, Archt., 508 Exchange Bldg., Little Rock; ready for bids.

Fla., Miami Beach—Jorge B. Sanchez, care of Fleetwood Hotel, plans residence within year, Star Island.

Fla., South Jacksonville, Jacksonville—Better Homes Co., erect \$12,000 Spanish type dwelling, River Blvd., San Marco; brick and stucco.

Ga., Augusta—Peter and Mrs. Stella Farris erect 2 hollow tile dwellings, 2026-28 McDowell St.; 5 rooms, cost \$5000 each.

Ga., LaGrange—H. H. Childs, erect \$18,000 residence; brick, 2 stories, Burge & Stevens, Archts., 101 Marietta Bldg., Atlanta.

Ga., Savannah—Chatham Land and Hotel Co., Realty Bldg., erect \$10,500 dwelling, 47th St., near Harmon St.; 2 stories, brick veneer.

Ga., Valdosta—Dr. W. C. Stroud erect residence, Ann and Tombs Sts.

La., Homer—Methodist Church let contract to F. C. McClanahan for parsonage; 8 rooms, Sheetrock, Textone.

La., New Orleans—L. Rosenson, 1600 Baronne St., erect 2 duplexes and fourplex, Elba and Gayoso Sts. and Camp and Fourth Sts.; total cost \$18,500.

La., New Orleans—Thos. T. Barr, 1507 Exposition Blvd., plans 2-story frame duplex, Exposition Blvd. and Hurst St.; work start about 60 days.

La., New Orleans—Chas. S. Young, 714 Volain St., erect 2 raised bungalows, Canal Blvd., 1 in Lakeview and 1 in Gentilly; soon want bids on tile roofing.

La., Opelousas—Mrs. L. B. Sandoz receiving bids at office Herman J. Duncan, Archt., 120 Murray St., Alexandria, for brick veneer and stucco residence; tile roof, Arcola system heat, tile and hardwood floors; following contractors estimating: S. W. Tudor; R. J. Jones, both Alexandria; R. F. McKinney, St. Landry Lumber Co., both Opelousas.

Md., Baltimore—Wm. G. Griesmer, Eagle and Smallwood Sts., erect \$25,000 stucco residence and garage, Springlake Way near St. Dunstons Rd., Homeland; 2½ stories.

Md., Baltimore—F. Herbert Haines, 18 York St., erect \$15,000 residence and garage, Tunbridge Rd. near Springlake Way; 2 stories, stucco.

Md., Baltimore—D. A. Davis, 802 E. Eager

St., erect \$12,000 stucco residence, Thornhill Rd. near Tilbury Way, Homeland, 2 stories.

Md., Baltimore—W. Hampton Linthicum, Frederick Ave., erect 10 brick dwellings, E. side Maryland Rd., S. of Frederick Rd.; 2 stories; total cost \$35,000.

Md., Baltimore—Harry L. Dubbelde Co., 2407 Ellamont St., erect 28 brick dwellings, 2300 block Longwood St.; 2 stories; total cost \$85,000.

Md., Baltimore—Philip L. C. Fischer erect residence, Wellington and Copleigh Rds., Stoneleigh.

Md., Baltimore—F. Herbert Haines, 18 York Court, erect \$15,000 residence and garage, Tunbridge Rd. near Springlake Way; 2 stories, stucco.

Md., Baltimore—Owners Realty Co., 2 E. Lexington St., erect 12 brick dwellings, N. E. cor. Mosher St. near Ellicott Driveway; 2 stories; total cost \$36,000.

Md., Solleys—Portworth Land Co. erect number bungalows and cottages, connection with development of Portlea, Stony Creek.

Miss., Baldwin—Mrs. A. C. Coggins erect brick residence; 1 story and basement, 6 rooms, shingle roof, wood lath, pine and oak floors, tile bath, Keen's cement wainscoting; Planry, Inc., Archt., 1713½ Live Oak St., Dallas, Tex.

Miss., Meridian—J. E. Jones Memorial Presbyterian Church plans rebuilding burned parsonage. Address The Pastor.

Miss., Ocean Springs—P. F. Doones, Jr., Archt., 3803 Cleveland Ave., New Orleans, La., receiving sub-bids for 2 hollow tile and stucco Spanish type dwellings, Gulf Hills; tile roofs, tile and hardwood floors; hot-water heaters.

Miss., Woodville—Mrs. W. W. Montfort erect face brick residence; 1 story, 6 rooms, Keen's cement wainscoting, canvas and paper, oak and pine floors, tile bath; Ye Planry, Inc., Archt., 1713½ Live Oak St., Dallas, Tex.

Mo., Clayton, St. Louis—C. J. Mellis, Gordon St., north of St. Charles, erect 9 brick dwellings, Beverly Hills; 2x32 ft. and 26x36 ft.; total cost \$32,500.

Mo., Kansas City—John C. Gallagher, Sec.-Treas., Faxon & Gallagher Drug Co., Eighth St. and Broadway, purchased home-site, 64th St. near Ward Parkway.

Mo., Kansas City—E. A. Clarkin, 2320 Benton St., erect 2 dwellings, 425-429 W. Edgevale Rd.; total cost \$20,000.

Mo., St. Louis—David Francis, Jr., 20 N. Kings Highway, erecting country residence, Warson Ridge on Clayton Rd.

Mo., St. Louis—J. L. Hamilton, care Edw. J. Lawler, Archt., 3672 Hickory St., erect \$38,000 brick residence, 15 Hampton Drive; 2 stories and basement, 43x33 ft., concrete foundation and floor slab, cut stone, marble and tile roof, marble and tile bath, oak floors, incinerator, hot water heat.

Mo., St. Louis—Chas. Schulte, Archt., 2806 N. Grand Ave., drawing plans for \$18,000 brick residence, Princeton Ave., University Park; 2 stories and basement, 37x32 ft., hardwood floors, tile baths, slate roof, hot water heat.

Mo., St. Louis—John B. Strauch, 3145 Russell Ave., erect brick residence, Denny Rd. near Manchester Rd.; stucco, cut stone, 2 stories and basement, 84x82 ft., slate roof, tile bath; Klipstein & Rathmann, Archts., 316 N. Eighth St.; bids in.

Mo., St. Louis—Wm. Valli, 5245 Bischoff Ave., erect \$20,000 brick residence, Boland Drive near Clayton Rd.; 2 stories and basement, 36x40 ft., concrete foundation, tile bath and kitchen, slate roof, birch trim, oak floors, orna. iron, hot water heat; Wm. P. McMahon, Archt.; 819 Buder Bldg.

N. C., Charlotte—Kinney & Hoblitzell erect 23 tenant houses, Frazier Ave., Jackson St., W. Fifth St. extension and W. Trade St. extension; total cost \$23,000.

Tenn., Forest Hill—Chas. E. Heckle, 1881 Lyndale St., erect wide siding residence; 2 stories and basement, 60x37 ft., tile bath, composition shingle roof, oak floors, garage; Polk W. Agee, Archt., 1516 Fidelity Bank Bldg.; both Memphis; bids in.

Tenn., Memphis—S. Leaker, 255 Hawthorne St., plans \$25,000 residence, Belvedere Blvd., near Peabody Ave.

Tenn., Memphis—J. W. McDonald, care S. M. Williamson Co., 115 Monroe Ave., plans \$15,000 brick and stone residence; 2 stories and basement, composition or tile shingle roof, oak floors, tile bath, garage.

Tenn., Memphis—Harry Price, care Price Barwick Co., plans 11 frame dwellings; 3 and 4 rooms, composition roof, pine floors.

Tenn., Nashville—Hunter McDonald, Jr.,

1915 West End Ave., erect brick residence, Belle Meade Park; terra cotta trim, 1 story, 58x69 ft., oak floors, metal lath, tile bath; Hart, Freeland & Roberts, Archts., 1211 Ind. Life Bldg.; bids in.

Tenn., Nashville—R. W. Hale, Ellison Apts., erect brick residence; 2 stories, oak floors, stone foundation, slate or composition roof; Hart, Freeland & Roberts, Archts., Ind. Life Bldg., starting plans. See Want Section—Building Materials and Equipment.

Tex., Coleman—J. W. Mead plans brick veneer residence, Commercial Ave. near Coleman.

Tex., Dallas—Harris-Brown Co., Inc., H. J. Harris, Pres., plans about 25 frame cottages during 1927; 4 and 5 rooms.

Tex., Dallas—D. M. Jones, 1914 Mosher St., erect \$10,000 residence, 5021 Swiss St.; brick veneer, 7 rooms.

Tex., Donna—E. Voltz, Oakville, Ontario, Canada, reported erect residence near Donna, connection with grape culture.

Tex., Fort Worth—F. V. Sprowls, erect \$18,000 brick veneer residence, 2101 Forest Park.

Tex., San Antonio—Wilson & Miller erect \$10,000 dwelling, 217 Club Drive; frame and stucco, 6 rooms.

Tex., San Antonio—W. H. Hearne, Alamo Nat. Bank Bldg., receiving bids, to be opened about March 3, for frame and stucco residence; cost \$16,000; 1 story, finished basement, wood lath, hardwood and tile floors, tile roof; Jas. I. White, Archt., Houston Bldg.

Tex., San Antonio—J. C. Rice, rejected bids for brick and stucco residence, Burleson and Fredericksburg Rds.; drawn new plans and call new bids; Frank Rice, Archt., both Medical Arts Bldg.*

Tex., Wichita Falls—Mytinger & Walker erect 14 bungalows; total cost \$37,400.

Government and State

Fla., Pensacola—Treasury Dept., Jas. A. Wetmore, Act. Supervising Archt., Washington, D. C., opens bids March 15 on repairs to U. S. Quarantine Station, Santa Rosa Island, C. W. deAlamberte, Custodian; repair and refinish interiors, reroof eight buildings, replace observation tower, new walks.

Miss., Armory—Mississippi National Guard, O. S. Anderson, Capt., 166th H & S Co. Engineers, plans \$10,000 armory, gymnasium and library building.

Miss., Biloxi—Mississippi National Guard probably open bids April 15 on following for National Guard Camp: (1) 7 combined bath-houses and lavatories; (2) 1 storehouse; (3) 1 well and water supply; (4) sewerage system; (5) electric light system; cost about \$35,000; additional construction later to cost about \$62,000; standard War Dept. plans; M. L. Culley, Engr., First Natl. Bank Bldg., Jackson. Address Major E. C. Lohr, U. S. V. & D. O., Miss. Nat. Guard, Vicksburg. See Want Section—Building Materials and Equipment.*

W. Va., Alderson—Treasury Dept., Jas. A. Wetmore, Act. Supervising Archt., Washington, D. C., receives bids April 5 for buildings, also for mechanical equipment and outside services for buildings at Federal Industrial Institution for Women; drawings and specifications for constr., also for mech. equipment and outside services, or for both, from office Supervising Archt.

Hospitals, Sanitariums, Etc.

Ala., Jackson—Miss Della Coxwell, Brew-ton, plans hospital.

Ala., Mobile—Kiwanis Club, Fred G. Lawton, Lieut.-Gov., plans children's ward at Cottage Hill tuberculosis sanatorium; Sol Kahn, 250 Church St., will erect sanatorium for negroes at Cottage Hill.

Ark., Booneville—Ancient Free and Accepted Masons of Arkansas add 2 wings to children's building at Arkansas Tuberculosis Sanatorium; Haralson & Nelson, Archts., Merchants Nat. Bank Bldg., Fort Smith; bids opened March 1.*

Ark., Osceola—Mississippi County Chamber of Commerce, Blytheville Chamber of Commerce, Blytheville, and others interested in county hospital. Address Bruce Ivy, Chmn., Health Comm., Osceola.

Ga., Milledgeville—Parks Memorial Hospital Comm. of Georgia State College for Women, Miss Mary Brooks, Pres., plans hospital as memorial to Dr. M. M. Parks.

La., New Orleans—Presbyterian Hospital, of New Orleans, 701-39 Carondelet St., plans \$1,000,000 hospital, site present structure; Rathbone DeBuys, Archt., Hibernia Bldg.

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La., Pineville—Central Louisiana Hospital for Insane, Dr. J. N. Thomas, Supt., receives bids March 17 (extended date) for (1) hospital building, (2) administration building, (3) supt.'s residence and nurses' home; cost \$250,000; reinforced concrete and brick, 2 stories; bids on entire group or 1 or 2 units; plans and specifications as follows: (1) from Herman J. Duncan, Archt., 120 Murray St.; (2) from C. Errol Barron, Archt.; (3) from E. Leo Ball, Archt., all Alexandria; following contractors estimating: Caldwell Bros., 816 Howard Ave.; Richard McCarthy, Canal-Commercial Bldg., both New Orleans, La.; S. W. Leard, 80 Maximilian St., Baton Rouge, La.; W. J. Quick, Swift Bldg.; P. Olivier & Son, 114 Bilbo St., both Lake Charles, La.; S. W. Tudor, R. J. Roland, both Alexandria; Albert G. Simms, Lake Village, Ark.; Geo. J. Burden, Moore & Turner Bldg., Little Rock, Ark.; W. G. Butler, 2106 Claiborne St., Shreveport, La.; F. G. Neely, 1115 Fidelity Bank Bldg., Memphis, Tenn.; Sandquist & Snow, 323 Calumet Bldg., Miami, Fla.*

Miss., Jackson—State Hospital Removal, Improvement and Land Sale Commission, R. L. Brown, Sec., Box 40, receives bids March 14 for electrical wiring, plumbing and heating in administration building commissary and laundry building, for \$4,500,000 Mississippi Insane Hospital; plans and specifications from N. W. Overstreet, Archt., Miss. Fire Bldg.*

Miss., Jackson—State Hospital Removal, Improvement and Land Sale Commission, R. L. Brown, Sec., Box 40, receives bids March 28 for hospital building, 2 convalescent cottages, 2 attendant's homes, officials' building and dining hall for \$4,500,000 Mississippi Insane Hospital; cost about \$600,000; plans and specifications from N. W. Overstreet, Archt., Miss. Fire Bldg.; Henry C. Muskopf, Landscape Archt.-Engr., 864 Newport Ave., St. Louis, Mo.*

Okla., Tulsa—Morningside Hospital, Mrs. M. J. McNulty, plans \$150,000 building, 12th and Utica Sts.

Tenn., Greeneville—Takoma Park Sanitarium, Dr. L. E. Coolidge, member, has broken ground for \$60,000 hospital for local branch; Jacoby & Everett, Archts., Allentown, Pa.

Va., Alexandria—Alexandria Hospital inaugurate \$100,000 campaign in May for enlarging building; J. B. Collins, Archt.

Hotels and Apartments

Ala., Huntsville—American Hotels Corp., Frank Gregson, Read House, Chattanooga, Tenn., Supv. Mgr., reported to erect \$1,000,000 hotel building. Mr. Gregson wires: "American Hotels only making survey; nothing definite yet."

Fla., Jacksonville—B. E. Francisco has permit for \$17,000, 2-story, tile apartment house, Oak between Gilmore and Fisk Sts., for Susan A. Prince.

Fla., Palm Beach—Paul Prybil, 26 Frost St., New York, and Palm Beach, announced plans for co-operative apartment building, fronting Barton Ave.; units to be 3 stories with roof gardens, several plans for units drawn by Marion Sims Wyeth, Archt., Wyeth Bldg.; associates are Frank O. Butler, 223 W. Monroe St., Chicago, and S. D. Morris, Farmers Bank & Trust Co., West Palm Beach.

Ga., Nashville—Dr. P. H. Askew and Judge W. R. Smith, members of corporation planning to start work March 1 on \$35,000, 2-story, hollow tile and stucco, 100x110 ft. hotel building; equipment and furnishings cost \$5000; expect to build with foreman and supervision of Lloyd Greer, Archt., Valdosta. See Want Section—Building Materials and Equipment.*

Ky., Ashland—Henry Clay Hotel Co., W. A. Glen, Chmn., Executive Comm., receives bids until March 31 for \$500,000, 8-story, 101x143.6 ft., fireproof hotel building, Winchester Ave. and 18th St.; concrete foundation, fireproof floors, composition roof; equipment and furnishings cost \$105,000; plans and specifications at temporary offices of Co., 335 16th St.; Moosmiller & Johnson, Archts., 40 Kenyon Bldg., Louisville. (See Want Section—Building Materials and Equipment.)*

La., Monroe—Hotel Virginia has plans in progress by E. J. Stearn, Little Rock, for 50-room addition.

La., Monroe—Hotel Virginia plans to convert present roof garden into 56 rooms, add another story; E. J. Stearn, Archt., Little Rock, Ark.

La., New Orleans—Mason & Spori, Archts., Vincent Bldg., receiving bids for brick and hollow tile, 9-apartment building, Napoleon Ave. and Baronne St.; composition roof.

La., New Orleans—Mrs. O. Tourne, 3538 Toledano St., erect \$10,000, 2-story, 4-

apartment house, Fontainebleau Drive; composition and tile roof.

Md., Baltimore—W. F. Terry, 4005 N. Charles St., purchased lot on St. Paul St. between 31st and 32nd Sts.; reported to erect apartment house.

Md., Baltimore—Harry E. Karr, Fidelity Bldg., C. W. Hendley, City Nat'l. Bank Bldg., and James Bruce, Baltimore St. and Hopkins Pl., members of syndicate planning \$6,000,000, 16-story hotel on site of Visitation Convent at Howard and Centre Sts.; will be named Lord Baltimore; 200x150 ft., 700 rooms, of which 667 will be bedrooms, each with bath, banquet hall and ballroom 2 stories high will occupy third floor, first floor for stores.

Miss., Gulfport—Shourds & Stoner, Inc., Archts., preparing preliminary plans and specifications for \$35,000, 2-story, frame and stucco Coleman Hotel building; 25 rooms and baths, asbestos and tile roofing.

Mo., Kansas City—Platt Land Co. erect \$30,000 apartment house at 916 Charlotte St. Mo., Kansas City—Mrs. Ada C. Mongrain, 601 W. Meyer Blvd., razing structure at Tenth St. and Forest Ave., replace with kitchenette apartment building.

Mo., Kansas City—J. Zolgin, 3951 Hyde Park Ave., erect \$10,000 apartment house at 510 W. Ninth St.

N. C., Asheville—Ronald Greene, Archt., Oates Bldg., started plans for \$100,000 apartment house for L. W. Hill, Contr., 229 Broadway, on site of Chestnut St. Methodist Church, Chestnut St. and Monroe Place; 12 or 15 apartments, stores on ground floor.*

Tenn., Jackson—A. D. Noe, Jr., of Southern Hotel receives bids until March 12 (postponed from March 5) for \$500,000, 175-room, 8-story and basement hotel building, replace hotel at Baltimore and Liberty Sts.; R. A. Heavener, Archt.*

N. C., Jefferson—Radium Springs Corp. of America, 1457 Broadway, New York. (See Buildings Proposed—Miscellaneous).

Tenn., Knoxville—C. J. Webber erect 20-room, brick veneer apartment building.

Tenn., Nashville—Gainesboro Apartment Co., Alb. Landis, Pres., Independent Life Bldg., received bids; soon let contract for \$200,000 apartment building. The Gainesboro, at 3405 West End Ave.; brick, limestone trim, upper and lower floors faced with asbestos stucco, suites of 6 and 8 rooms with 2 or 3 baths, elevator, asbestos plaster walls; Dougherty & Gardner, Archts., Cotton States Bldg.

Tex., Abilene—Blue Bonnet Hotels Co., Floyd Singleton, Mgr. of Gholson Hotel at Ranger, Pres., announced plans for 150-room, 7 or 8-story hotel, to be built during 1928; also planning buildings at San Angelo, San Antonio and Corpus Christi.

Tex., Harlingen—J. J. Burke, owner of Reese-Wil-Mond Hotel, taking estimates on \$50,000, 68-room addition.

Tex., Houston—Mrs. Carrie Prall erect \$12,000, 4-apartment building, 603 W. Polk St.

Tex., Mercedes—W. T. Johnson, 501 E. Dewey St., San Antonio, secured option on site, plans hotel building; James I. White, Archt., Houston Bldg., San Antonio, also interested.

Va., Petersburg—Harry P. Stratton, 236 S. Sycamore St.; Thomas Wythe and S. Dale Craig, Nat. Bank Bldg., planning to erect \$100,000, 3-story, fireproof apartment house, Jefferson and Filmore Sts.; 300x100 ft., 24 apartments; plans by Mr. Craig.

Miscellaneous

Ala., Anniston—Anniston Country Club has plans in progress by Warren, Knight & Davis, Empire Bldg., Birmingham, for proposed clubhouse.*

D. C., Washington—American Red Cross, 17th and D Sts., plans \$300,000 addition, near 17th St.

Mo., St. Louis—St. Louis Speedway & Fair Assn., incorporated by Robert E. Lee, 3124 Locust St., Charles Dorn, 7009 Page St., and others; plans permanent exposition buildings, motor speedway, grandstand and bleachers with seating capacity for 50,000, clubhouse, etc., at cost of \$1,250,000, near Bridgeton.

N. C., Jefferson—Radium Springs Corp. of America, 1457 Broadway, New York, Charles J. Guy, Pres. and Arthur S. Bandler, Vice-Pres., both New York, incorporated to develop Shattley Springs property, near Jefferson; engaged Renton & Benton, Archts., Fidelity Bldg., Wilson, draw plans for hotel, clubhouse, bathhouse, auditorium and studio.

Okla., Shawnee—Board of Directors Shawnee Country Club considering new building, replace clubhouse recently burned.

Tenn., Chattanooga—Hewitt Wood, Chmn., Building Committee, has plans ready for general contract bids for Chamberlain Field stadium; J. C. Gauntt, Archt.

Tex., Abilene—West Texas Fair, W. J. Fulwiler, Pres., soon let contract for \$30,000 livestock exhibit building.

Railway Stations, Sheds, Etc.

Tex., Liberty—Southern Pacific Lines, R. W. Barnes, Ch. Engr., Houston, received bids for \$30,000, 1-story, frame and stucco, 25x178 ft. passenger and freight station.

Schools

Ala., Birmingham—City votes April 12 on \$3,500,000 school improvement bonds; address Board of Education.

Ala., Decatur—City Council call election March 23 on \$50,000 bonds, construct new buildings and improve present schools.

Ala., Huntsville—City voted \$75,000 school bonds. Address Board of Education.*

Ark., Jonesboro—Directors of Common School District No. 66 of Craighead County, J. N. Hopkins, Director, receives bids March 5 for improvements and addition to school building.

Ark., Little Rock—Board of Trustees of Galloway, Hendrix and Henderson-Brown Colleges, the Boards of Education of Little Rock Conference and North Arkansas Conference and presiding elders of both conferences approved plans to build \$3,000,000 university; program recently worked out by Arkansas Methodist Educational Commission and Little Rock Chamber of Commerce, which has agreed to provide site and \$1,000,000.

D. C., Washington—District Commissioners, Room 509 District Bldg., approved plans for \$475,000 Gordon Junior High School, 34th St. and Wisconsin Ave.; A. L. Harris, Municipal Archt., District Bldg.

Fla., Fort Lauderdale—Broward County Board of Public Instruction soon ask bids for construction Spanish type, 16-room school building in North Lauderdale section, on Avenue F; Burton & Routt, Archts.

Fla., Lake Worth—Palm Beach County Board of Public Instruction, West Palm Beach, probably call \$175,000 bond election; provide for new junior high school, additional building at Lantana, install central heating plant for proposed junior high, senior high and West Grade school.

Fla., Leesburg—Lake County Board of Public Instruction, Tavares, call election March 29 on \$300,000 bonds; plans drawn by H. W. Griffin, 512½ Main St., Daytona Beach, for junior and senior high school building.*

Fla., St. Augustine—State Board of Control, P. K. Yonge, Chmn., Hotel White House, Gainesville, receives bids until March 14 for dormitory at Florida School for the Deaf and Blind; plans and specifications from Rudolph Weaver, Archt., 200 Penbody Hall, University of Florida, Gainesville.

Fla., St. Petersburg—George M. Lynch, City Supt. Schools, announced plans for primary schools at 26th St. and Lakeview Ave. South, 16th St. and 19th Ave. North, and a colored school on site not yet obtained; \$385,000 available.

Fla., St. Petersburg—St. Petersburg School District votes March 8 on \$450,000 bonds for following: Buildings and purchase of grounds, \$355,000; equipment \$50,000, and improvement of grounds \$45,000; Pinellas County Board of Public Instruction, Clearwater.

Ga., Flintstone—Consolidated School District voted \$35,000 bonds for school building. Address Walker County Board of Education, Lafayette.

Fla., Titusville—Brevard County Board of Public Instruction purchased 20-acre site for school buildings.

Ky., Ashland—Board of Education, A. J. Brown, Sec. receives bids March 10 for school building on Gartrell Hill; \$100,000, tile and marble corridors, steam heat.

Ky., Bowling Green—Western State Teachers' College Board of Regents expend \$20,000 for asphalt drives and landscape gardening on campus; authorized Brinton B. Davis, Archt., Columbia Bldg., Louisville, prepare plans for stadium.

Ky., Lexington—Board of Education, R. D. Norwood, Pres., plans improvements to Ashland and Arlington schools; \$20,000 each.

La., Baton Rouge—East Baton Rouge Parish School Board, W. H. Perkins, Pres., will consider competitive architects' sketches for \$45,000, 2-story, brick elementary school, district No. 12, south of Bayou Monte Sano.

La., Bonita—Morehouse Parish School Board, Bastrop, call election April 4 in District No. 10 on \$35,000 school bonds; open

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bids about July 1 for \$20,000, 1-story, frame, 7-room and auditorium school building; Smith & Land, Archts., Monroe.

La., Lafayette—Southwestern Louisiana Institute let contract to P. Oliver & Son, 114 Bilbo St., Lake Charles, at \$127,350, for two 3-story, brick and reinforced concrete dormitory buildings; Favrot & Livaudais, Archts., Hibernia Bldg., New Orleans.*

La., Many—J. W. Smith, Archt., Monroe, completing plans and specifications for \$50,000, 2-story, brick and reinforced concrete High School building; composition roof, steam heat; Sabine Parish School Board, owners.*

La., New Orleans—Mater Dolarosa congregation, Monsignor J. L. Prim, pastor, receives bids March 8 for 3-story, face brick and stone trim parochial school building, S. Carrollton Ave. between Oak and Plum Sts.; composition roof, concrete foundation, structural steel and iron work, sprinkler system; Favrot & Livaudais, Archts., Hibernia Bldg.

La., Scotland—Favrot & Livaudais, Archts., Hibernia Bank Bldg., New Orleans, receive bids until March 11 for 2-story, brick and stone trim science and agricultural building, and 1-story brick auditorium, for Southern University; composition roof, steam heat.

Miss., Caledonia—Board of Trustees Caledonia School District call bond election for new school building.

Miss., Moorhead—C. T. Bookout, Pres. Board of Trustees, Sunflower County Agricultural High School and Junior College, receives bids until March 10 for Administration Building; J. M. Spain, Archt., Jackson; F. K. McGeoy, Supv. Archt., Greenwood.

Miss., Perkinson—Board of Trustees of Harrison-Stone-Jackson Counties receives new bids March 16, in Harrison County courthouse, Gulfport, for brick veneer dormitory building and brick gymnasium; remodeling and repairing dining room and building of brick kitchen and power plant, for Agricultural High School and Junior College; all bids opened Feb. 15 rejected; Harkness & Lockyear, Archts., Gulfport.*

Mo., Sedalia—Board of Education call election March 2 on \$400,000 school bonds.

N. C., Charlotte—School Board will open bids May 1 for \$225,000, 3-story, concrete, 200x60-ft. Fourth Ward Junior High School at Irwin Park; Lockwood, Greene & Co., Archts., Johnston Bldg.*

N. C., Davidson—Board of Trustees of Davidson College announced gifts of \$182,000 for completion of Chambers Building.

N. C., Greensboro—Gulford County Board of Education considering location for Florence school, between Jamestown and High Point.

N. C., Hickory—Lenoir-Rhyne College, H. B. Schaeffer, Pres., will have \$450,000 available for building program.*

N. C., Jackson—P. J. Long, Supt. Northampton County Board of Education receives bids March 7 for 1-story, 8-room school building; plans drawn by Frank B. Simpson, Archt., Masonic Temple Bldg., and furnished by State Board of Education, Raleigh.

N. C., Kinston—Lenoir County School Board plans addition to La Grange school group.

N. C., Mooresville—Town voted \$50,000 school bonds; address School Board.

N. C., Winston-Salem—Board of Education considering erecting new school in Ardmore section.

Okla., Okmulgee—City voted \$250,000 bonds to build 2 new schools and additions to 2 others. Address Board of Education.

Okla., Tulsa—Board of Directors University of Tulsa considering erecting 3 buildings on campus—library, fine arts and science hall.

S. C., Taylors—Greenville County Board of Education, Greenville, soon call \$35,000 bond election for High School and equipment.

Tenn., Chattanooga—Fred B. Frazier, Commissioner of Education, receives bids until March 11 for grammar school on West Side; separate proposals for heating, plumbing and wiring; plans and specifications from W. H. Sears, Archt., James Bldg.

Tenn., Pulaski—Martin College, Dr. T. C. Ragsdale, Pres. Board of Trustees, plans constructing additional unit; central building to house heating plant and storage room for coal, administration building, swimming pool and gymnasium.

Tex., Beaumont—School Board of South Park Independent School District receives bids until March 11 for \$125,000, 2-story, semi-fireproof school building; 14 classrooms, auditorium, cafeteria, gymnasium and

library; 215x50 ft., 2 wings, wood floors, concrete foundation, tar and gravel roof; Livesay & Wiedemann, Archts., 607 Jacinto Life Bldg.*

Tex., Big Lake—David S. Castle Co., Archts., 701-4 Alexander Bldg., Abilene, selected to prepare plans for \$75,000 High School building at Big Lake; also \$25,000 building at Stiles; address Boards of Education.*

Tex., Brenham—Board of Education, J. L. Chappell, Sec., have plans about March 20 for \$140,000, 2-story, 12-classroom, 4 science rooms and auditorium, brick, reinforced concrete frame High School building; metal lath and plaster, cast stone trim, wood, tile, linoleum and composition floors; Gleescke & Harris, Archts., 207 W. Seventh St., Austin.*

Tex., Colorado—Spade Common School District, Mitchell County, voted \$15,000 bonds for 5-room and auditorium school building; B. A. Falkner, trustee of school.

Tex., El Paso—Board of Education has plans in progress by R. S. Glenn, Cisco, for \$30,000 school building.

Tex., Hereford—Catholic Church, care Father Salvator, has private plans under way for \$10,000, 1-story and basement, semi-fireproof, brick, steel and reinforced concrete parochial school building.

Tex., Houston—Supv. Archt. Harry D. Payne preparing plans for \$10,000 addition to Bowie School, \$20,000 Chew School, new \$25,000 unit to Crawford School; Joseph Finger, Keystone Bldg., drawing plans for \$55,000 addition to Ben Milam School; J. W. Dehnert, Kress Bldg., additions to Cooley and Sherman schools; Hedrick & Gottlieb, Post-Dispatch Bldg., 9-room, reinforced concrete, brick and tile addition to John Marshall Senior High, also \$35,000 addition to Brackenridge School.

Tex., Houston—Harry D. Payne, Supv. Archt. of Board of Education, commissioned Endress & Cato, Archts., Bankers Mortgage Bldg., prepare plan for reinforced concrete, brick and tile Woodland School building.

Tex., Medford—School Board call \$20,000 bond election for school auditorium and gymnasium buildings.

Tex., Perryton—Perryton Independent School District voted \$75,000 bonds for High School building.

Tex., Raymondville—Santa Margarita Independent School District School Board call election March 19 on \$25,000 bonds for 4-room, brick and tile school.

Tex., Sherman—Kidd-Key College, Ed Spurlock, Pres., receiving bids for reinforced concrete frame for \$175,000 Administration Building; contract for auditorium and completion of job to be let later; brick, terra cotta stone, fireproof, 3 stories, 136x188 ft., reinforced concrete frame and floor slabs; Clyde & Rolfe, Archts., 306 Commercial Bank Bldg.; W. E. Joor, Struc. Engr., 601 Slaughter Bldg.*

Tex., Stiles—See Tex., Big Lake.

Va., Chesterfield—Chesterfield County Board of Education, C. W. Morrisette, Chmn., receives bids March 24 for 5-classroom and auditorium, brick school building; plans and specifications from R. V. Long, Archt. of Department of School Buildings of State Board of Education, Richmond.

Va., Front Royal—Warren County Board of Education will erect addition to High School; auditorium to seat 900, domestic science room, 7 classrooms and library; convert old auditorium into 3 classrooms.

Va., Richmond—Richmond Academy of Medicine, Dr. Stuart N. Michaux, Pres., completing plans for \$75,000, fireproof home for Miller library of medicine, N. E. cor. 12th and Clay Sts.; Medical College of Virginia appropriated \$35,000 for new library building, to be built on adjoining lot and connected by passageway.

W. Va., Wellsburg—School Board considering erecting new High School building.

Stores

Ala., Birmingham—Suburban Investment Corp., erect 1-story, hollow tile and stucco, 60x80 ft. store building, English Village, Milner Heights; C. H. McCauley, Archt., 709 Jackson Bldg.

Ark., Pine Bluff—Henry and Leo Berg, Camden, reported planning to erect 6 or 7 stores; cost \$90,000 to \$100,000.

Fla., Miami—Linklater & Gaffney erect \$13,000 business building at 2105 Ponce de Leon Blvd.

Fla., Winter Haven—A. S. Beymer, owner of Beymer Bldg., Third St. and Central Ave., and Fred Foster, Chicago, Ill., purchased property at Third St. and Park Ave., plan 2-story business block.

La., Minden—Bridges & Channell Clothing Co. erect 1-story brick building on N. Broadway St.; Dan W. Stewart, Sr. plans structure on N. Broadway St.

Md., Baltimore—J. W. Holloway Co. remodel 3-story building at 204 W. Saratoga St.

Miss., Jackson—Claude H. Lindsley, Archt., Lamar Life Bldg., preparing preliminary plans for \$40,000, 2-story, brick, 50x100 ft. store building; plate glass window fronts, composition roof.

Miss., Tupelo—Millam & McMillan erect \$20,000, 2-story, brick business building on Broadway.

Mo., Columbia—J. N. Fellows will erect \$30,000 business building, S. E. cor. Conley and Gentry Aves.

Mo., Kansas City—Duplex Building Co., 209 E. Tenth St., erect \$12,000 business building, 1211 Michigan St.

Mo., Springfield—C. H. Frederick, 921 Meadowmere St., will erect 2 buildings, St. Louis St. and the Boulevard, this spring; fireproof, brick and concrete.

N. C. Boone—Edward N. Hahn plans \$35,000 building, 5 storerooms on first floor, offices and apartments on second.

N. C., Greensboro—Dr. A. F. Fortune and W. G. Tenelle opened bids for erecting 3-story, 52x108 ft. building on S. Greene St.; Walter Kidde Co., 140 Cedar St., New York and Greensboro, low bidders; W. W. Dick, 246 Bellemeade St., low bidder on heating; Harry Barton, Archt., Jefferson Bldg.*

Tex., Beaumont—Tyrrell Hardware Co., 600 Orleans St., will remodel building at 432 Fannin St.; \$10,000.

Tex., Brownsville—Dave Young erect 2-story, 50x120 ft. business building.

Tex., Carrizo Springs—Epps G. Knight purchased 2 business lots, improve with business buildings and residences.

Tex., El Paso—Popular Dry Goods Co., A. Schwartz, Pres., acquired corner Texas St. and Mesa Ave., will remodel building at cost of \$25,000.

Tex., Fort Worth—Empire Development Co. erect \$50,000, brick and steel store, Seventh and Lexington Sts.

Tex., Fort Worth—J. F. Tanner, 706 Lilac St., erect \$15,000, concrete, brick and steel store building, Alston and Magnolia Sts.

Tex., Houston—J. J. Montano, San Antonio, leased building at 126 W. Houston St., start remodeling at once.

Tex., Kerrville—Henke Brothers have plans in progress by McCreary & Schott, for 35x60 ft. store building on Water St.

Tex., Mercedes—G. K. Watson soon award contract for 2-story, brick store and office building; R. Newell Waters, Weslaco, and Ralph H. Cameron, City Natl. Bank Bldg., San Antonio, Archts.

Tex., San Antonio—M. C. Becker and Ben M. and Robert J. Levy purchased site at Texas and Smith Sts., planning \$75,000, 2-story store and hotel building.

Tex., San Benito—Feliz L. Gay has plans in progress by Callaway & Nethercot, Corpus Christi, for \$30,000, 2-story, 50x75 ft. reinforced concrete store and office building.

Tex., San Benito—Hinkley & Sublet plan \$75,000, 2-story, brick building; Van Sicklen, Archt., Brownsville.

Theaters

Fla., Plant City—Universal Pictures Corp., Atlanta, Ga., has plans in progress by Roy A. Benjamin, Bisbee Bldg., Jacksonville, for rebuilding Capitol Theater, recently burned.*

Ga., Thomasville—Nat Williams, reported has low bid from Palmer-Spivey Construction Co., 124 Eighth St., Augusta, for \$80,000 theater building; C. K. Howell, Archt., Atlanta.*

Ky., Louisville—Temple Theater Corp., J. E. Dunne, Pres., 127 W. Market St., complete theater in office building, at cost of \$60,000; Joseph & Joseph, Archts., Francis Bldg. (See Want Section—Machinery and Supplies.)

Miss., Pass Christian—S. L. Taylor, owner of Kozy Theater, announced plans for \$30,000, hollow tile and cement theater on present site; seating capacity 800; heating and cooling systems; Moise H. Goldstein, Archt., Hibernia Bldg., New Orleans, La.

Miss., Tupelo—Moore & Gregory have plans for \$80,000 theater building, work to start at once; seating capacity 1200, 70x165 ft., 50-ft. lobby; offices on second floor front.*

Warehouses

Okla., Tulsa—Roy Page, 1415 S. Baltimore St., plans \$150,000 warehouse, 13th and Elgin Sts.

In writing to parties mentioned in this department it will be of advantage to all concerned if the Manufacturers Record is mentioned.

BUILDING CONTRACTS AWARDED

Association and Fraternal

Fla., Umatilla—Austin-Giles Post, American Legion, excavating for \$12,500 clubhouse, Ocala St.; hollow tile or brick, 2 stories, 45x70 ft., oak floors, concrete foundation, roofing not decided; address proposals on furnishings, equipment, etc., \$2500, to A. L. Smith; other proposals to F. L. Bowron, 303 Kentucky Ave.; J. H. Beauchamp, Archt., 306 Kentucky Ave.; engineer not selected; J. E. Gardner, Contr. See Want Section—Building Materials and Equipment.

Ky., Louisville—Apperson Lodge No. 195, A. F. & A. M., let contract to Ramsey & Gatlin, Ashland, for \$180,000 building; steel, concrete and brick, 5 stories and basement, fireproof, vapor heat; 3 stores, dining room banquet hall and lobby on first floor, 65 hotel rooms on next 3 floors, lodge quarters on top floor; Wysong & Bengston, Archts., Professional Bldg., Charleston, W. Va.

Okla., Heavener—Dyke Bros., S. Ninth St., have millwork and roofing contract for \$30,000 city hall; stone, Fort Smith Stone & Monument Co.; steel, Fort Smith Structural Steel Co., 900 Wheeler St., all Fort Smith, Ark.; plumbing, Woodward Heating & Plumbing Co., Heavener; brick, Choctaw Brick & Gas Co., Mansfield, Okla.; Haralson & Nelson, Archts., Merchants Bank Bldg., Fort Smith; W. P. Gray, Contr., Howe, Okla.*

Tex., Galveston—Lodge No. 126, B. P. O. E., let contract at about \$15,000 to Wm. Kothe for remodeling clubhouse; R. R. Rapp, Archt., Guarantee Bldg.

Bank and Office

Ky., Louisville—Heyburn Building Co., First and Main Sts., let contract to Struck Construction Co., 147 N. Clay St., for \$2,000,000 store and office building, Fourth St. and Broadway; fireproof, struct. steel, tile arch floor constr., brick, stone, terra cotta and granite exterior, 17 stories and basement, wood floors, composition roof; excavating and laying concrete footings for foundation; Graham, Anderson, Probst & White, Archts., Railway Exchange Bldg., Chicago, Ill.; struct. steel to Jones & Laughlin Steel Co., Ross St., Philadelphia, Pa.; steel erection, Oscar Daniels Co., 38 S. Dearborn St., Chicago; plumbing, Crescent Plumbing & Heating Co., 148 N. Fourth St.; heating, ventilating and electric wiring, F. A. Clegg & Co., 110 S. First St.; elevators, American Elevator & Machine Co., 500 E. Main St., all Louisville; following sub-contracts let by Contr.: Underplanning, Spencer, White & Prentiss Co., 1200 Wash. Bl. Bldg., Detroit, Mich.; hollow tile floor arch construction, T. G. Nicholson Co., 53 W. Jackson Bl.; architectural terra cotta, Northwestern Terra Cotta Co., 2525 Clayborn Ave., both Chicago; hollow tile partitions, Southern Fireproofing Co., Atlanta, Ga.; orn. iron work, Builders Iron Works Co., 309 Dorena St., St. Louis, Mo.; excavation, Highland Motor Transfer Co., 644 Baxter St.; marble, art marble and non-slip tile, granite and cut stone work, Peter Burghard Stone Co.; millwork, Anderson Manufacturing Co., Garden and Chestnut Sts.; plastering, Wm. P. Bannon, Brook and Bloom Sts., all Louisville; Contrs. have not yet let contracts for brick work, roofing, sheet metal work, glass and painting.*

La., Amite—Amite Bank & Trust Co. let contract at \$55,750 to Caldwell Bros., 816 Howard Ave., New Orleans, for reinforced concrete and brick building; 2 stories, cast stone trim, marble and tile floors, vaults, steel sash, bank fixtures, steam heat; Sam Stone, Jr., & Co., Archts., Masonic Temple Bldg., New Orleans; vaults to Herring, Hall & Marvin Safe Co., Dameron-Person Co., Ltd., representatives, 400 Camp St., New Orleans, at \$5376; reinforced steel, Ole K. Olsen, 822 Perdido St.*

La., New Orleans—Metairie Bank & Trust Co. let contract at \$35,395 to Gervais F. Favrot, Balter Bldg., for hollow tile and stucco bank and store building, Metairie Ridge; 2 stories, plate glass show windows, on marble base, tile floors and roof, bank and store fixtures, vaults; Favrot & Livaudais, Ltd., Archts., Hibernia Bldg.*

La., New Orleans—Lyman C. Reed, Hibernia Bank Bldg., has electric panelboard and switchboard contract for \$1,200,000 office building for New Orleans Public Service, Inc.; Favrot & Livaudais, Ltd., Archts., Hibernia Bldg.; Geo. J. Glover Co., Inc., Contr., Whitney Central Bldg.*

N. C., Charlotte—Independence Trust Co., J. H. Little, Pres., let contract to James Baird & Co., 4901 Connecticut Ave., N. W., Washington, D. C., to alter and add 2 stories

to 12-story Realty Bldg., Independence Sq.; cost \$350,000; remodel office section by changing location of main entrance and elevators, install 3 passenger elevators, refinish corridors with marble floors and wainscoting, remodel basement and banking room, new vaults and equipment; W. L. Stoddard, Archt., 50 E. 41st St., New York.*

Okla., Tulsa—Tulsa Medical Society, Dr. C. W. Day, member, 502 S. Boulder St., let contract to Manhattan Construction Co., Manhattan Bldg., Muskogee, for \$750,000 Medical Arts Bldg., Sixth and Boulder Sts.; reinforced concrete, 11 stories and basement, 60x140 ft., concrete, terrazzo, tile and marble floors, composition roof; A. M. Atkinson, Archt., Mid-Continent Bldg., Tulsa; Horner, Wyatt & Roads, Engrs., Board of Trade Bldg., Kansas City, Mo.; Contrs., advise no sub-contracts let.*

Tex., Abilene—Albany National Bank, care W. G. Webb, Cashr., erect \$20,000 building; brick, 2 stories 25x50 ft.; C. H. Griesenbeck, Archt., 607 Construction Bldg.; C. A. Fuess, Contr., 1900 N. St. Paul St., both Dallas.

Tex., Amarillo—Acme Brick Co., 504 Amarillo Bldg., has brick contract for \$1,000,000 Medical Arts Bldg. for Fisk Investment Co.; Guy A. Carlander, Archt., 15 Massie Bldg., both Amarillo; Gilsonite Contracting Co., Contr., Athletic Club Bldg., Dallas.

Tex., Houston—Vermont Marble Co., Binz Bldg., has marble contract for \$75,000 Carnegie Steel Co. office building; Maurice J. Sullivan, Archt., Second Natl. Bank Bldg.; Don Hall Construction Co., Contr., Cotton Exchange Bldg.*

Tex., Llano—Western Granite Works has granite contract for Central State Bank building, Abilene; also for First State Bank, Kerrville.

Tex., Raymondville—Raymondville State Bank let contract to Rayburn Construction Co. for reinforced concrete and brick addition; 32x64 ft.*

Tex., Yoakum—Yoakum Light & Water Co., 310 Lott St., completed foundation for \$35,000 office building; brick, 1 story, 40x80 ft., cement and tile floors, gravel roof; L. Harrington Co., Archts., Builders Exchange Bldg., San Antonio; F. O. Crawford, Contr.

Churches

Ala., Birmingham—Shiloh Baptist Church, Rev. Albert Garner, Pastor, Seventh Ave. and 19th St., laying foundation of building, 14th St. and Avenue G; day labor.

Fla., Dania—Methodist Episcopal Church, Rev. W. W. Shoup, Pastor, erect building by day labor.

Ga., Savannah—True Love Baptist Church started work on building; Clarke & Clarke Co., Contr., 16 E. Bryan St.

Ky., Russell—Methodist Episcopal Church, Belmont St., erecting building; brick, 2 stories, about 50x100 ft.; J. H. Pennington, Contr.*

Mo., Joplin—First M. E. Church, Ed. Davis, Chmn. Bldg. Comm., start work on \$45,000 addition, Fourth St. and Byers Ave., in few days; gray stone, 2½ stories, 44x97 ft.

N. C., Charlotte—Hook & Hastings Co., Kendall Green, Mass., has pipe organ contract for \$600,000 church under construction by Tryon Street and Trinity Methodist Churches; Spencer & Phillips, Archts., Goodwyn Inst. Bldg., Memphis, Tenn.; J. P. Little & Sons, Contrs., Independence Bldg.*

Okla., Medford—First Christian Church, Rev. Ivan Duggan, Pastor, erect \$15,000 Colonial building; brick, 1 story, 85x55 ft., wood floors, reinforced concrete foundation, asbestos shingle roof; bids opened March 1. Address R. W. Shaw, Archt., Masonic Bldg., Enid.*

Tenn., Chattanooga—Mizpah Reform Jewish Congregation, Milton B. Ochs, Chmn., Bldg. Comm., let contract for \$250,000 Bertha and Julius Ochs Memorial Temple and Educational Building to Mark K. Wilson Co., Tenn. Electric Power Bldg.; Colonial Type, special brick, Georgia marble interior and exterior trim; Henry B. Herts, Archt., 25 W. 43rd St., New York; Chas. E. Boarden, Supervising Archt., First National Bank Bldg.

Tenn., Memphis—Following sub-contracts let for \$700,000 Idlewild Presbyterian Church under construction by B. E. Buffalo & Co., 602 Columbian Mutual Tower; Roofing slate, Rising & Nelson Slate Co., West Pawlet, Vt.; casement windows and glazing, Crittall Case-ment Window Co., 1095 Harp St., Detroit, Mich.; boilers, Kewanee Boiler Co., Kewanee,

Ill.; plumbing, Pritchard Bros., 433 Madison St.; heating, Hughes Heating Co., 672 Madison St.; electrical work, Jos. Fowler Electric Co., 118 Monroe St.; plastering, J. M. Murray, 2124 Lee Pl.; sheet metal and slate roofing, Jake Dermon Sheet Metal Works, 122 Poplar St.; cut stone, Christie Cut Stone Co., 2082 Elzey St.; hardware, Stewart Bros. Hardware Co., 86 N. Main St.; millwork, Cole Manufacturing Co., 789 S. Fourth St.; Pfeil & Awsumb, Archts., Dermon Bldg., all Memphis.*

Tex., Cisco—First Baptist Church let contract at \$36,440 to Christy-Dolph Construction Co., Central Bank Bldg., Dallas Tex., for church and Sunday school; fireproof, brick, stone, steel and reinforced concrete, 3 stories; R. H. Hunt Co., Archt., 1407 S. W. Life Bldg., Dallas, and James Bldg., Chattanooga, Tenn.*

Tex., Hallettsville—Lutheran Church erecting building at Willett near Hallettsville.

Tex., San Antonio—St. Mary's P. E. Church let contract for \$84,000 parish house to W. C. Perry, Bedell Bldg.; reinforced concrete, brick and stone, 4 stories, 48x112 ft., wood and cement floors, copper-clad shingle roof; Giles & Beckmann, Archts., Moore Bldg.; work started.*

Va., Richmond—St. Stephens P. E. Church, Chas. L. Ruffin, Chmn., Bldg. Comm., completed foundations for \$135,000 building,

City and County

Ala., Birmingham—City, Eunice S. Hewes, Clk., let contract for \$165,000 fire station and garage, Fourth Ave., S., and 19th St., to W. L. Coston & Sons, 3030 Ave. F, Ensley; brick, 2 stories, 175x140 ft., rein. concrete and mill constr., stone trim, steel trusses, asphalt roof, cement floors, steel sash, D. O. Whilldin, Archt., 515 N. 21st St., plumbing, Alabama Supply Co. 931 N. 20th St.; heating, Mason & Dullon, 2019 N. Fourth Ave.; wiring, Bagby Elevator & Electric Co., 121 S. 20th St.*

Ala., Decatur—Morgan County Board of Revenue erect brick courthouse to replace structure burned at \$75,000 loss; plans ready early part March; day labor; wood joists, 2 stories and basement, 75x140 ft.; Bem Price, Archt., 1418 Age-Herald Bldg., Birmingham.*

Fla., Miami Beach—City Council let contract at \$212,650 to H. A. Peters Co., 19 S. La Salle St., Chicago, Ill., and Miami, Fla., for city hall; fireproof, steel and tile, 50x160 ft., 2 stories, 6-story tower, tile and built-up roof, concrete floor slabs, pile and concrete foundation, 2 passenger elevators; furnishings, equipment, etc., \$25,000; Martin J. Hampton Associates, Archts., Royal Palm Casino; Stuhman, Engr., Seybold Bldg.*

Miss., Pass Christian—Contile Co., Inc., 7937 Edinburg St., New Orleans, La., has Contile contract for \$25,000 city hall; Smith & Norwood, Archts.; Beckelheimer & Small, Contrs., both Gulfport.*

Okla., Beaver—Beaver County Board of Commrs. let contract at \$60,782 to S. S. Strong for remodeling and addition to courthouse; Butler Co., Archt., Hersk Bldg., Oklahoma City.

Tex., Abilene—City let contract at \$12,200 each for 2 fire stations to J. R. Horn & Sons; fireproof brick and concrete; Wm. Nichol and Geo. F. Campbell, Archts., 29-30 Radford Bldg.*

Tex., Alice—City, P. S. Anderson, City Sec., erect \$15,000 city hall and fire station; brick, hollow tile and reinforced concrete, 2 stories, stucco trim, composition roof, wood and concrete floors, iron stairs, metal ceilings, vault door, gas heating; Hardy & Curran, Archts., Higgin Bldg., Corpus Christi; owner builds.

Tex., San Antonio—Bexar County Board of Commrs. let following contracts for equipment for \$1,000,000 courthouse addition: Electrical fixtures, Martin Wright, 104 Elm-stere St., \$14,880; electric fans, Travis Electric Co., Medical Arts Bldg., \$10,671; wood furniture, San Antonio Printing Co., 130 Soledad St., \$73,861 and \$2948; Rodgers Furniture Co., \$3297 and \$1384; Maverick Clark Litho Co., 8 St. Mary's St., \$1283, \$3220 and \$8625; Items 8, 9, 10 not yet let; Phelps & DeWees, Archts., Gunter Bldg.; Walsh & Burney, Contrs., 928 N. Flores St.*

Dwellings

Ala., Alabama City—Dwight Manufacturing Co., let contract to Fiske-Carter Construction Co., Masonic Temple Bldg., Greenville, S. C., for 15 three-room, 65 four-room and 20 five-room operatives' dwellings; plans by owner; no sub-contractors.

Ala., Birmingham—Allison-Russell-Withington Co., 2026 Fourth Ave., N., completed foundation for \$18,000 dwelling; brick ve-

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neer, 2 stories, 35x56 ft., oak floors, composition roof; American Trust Bldg.; Paramount Construction Co., Contr., both 2026 Fourth Ave., North. See Want Section—Building Materials and Equipment.

Ala., Birmingham—W. F. Brantley, care C. K. McCauley, Archt., 709 Jackson Bldg., erect stone residence, Milner Heights; 2 stories, slate roof, tile bath, steam heat; Paul Bros., Contrs., Hollywood.

Ala., Birmingham—L. E. Ford, 2117 N. First Ave., started work on brick veneer dwelling, Mountain Brook Estates; 1 story, slate roof, steam heat; Warren, Knight & Davis, Archts., 1603 Empire Bldg. builds.

Ala., Birmingham—H. W. Tinker, Jr., 825 S. 39th St., erect frame residence, Crestline Heights; 1 story, 5 rooms, composition roof, furnace heat; L. E. Ford, Contr., 2117 N. First Ave.

Ala., Birmingham—Woodard & Lynch, 2115 N. First Ave., erect 2 frame dwellings, 80th St. and Lee Ave.; 1 story, 6 rooms, composition roofs, furnace heat; day labor.

Ala., Birmingham—L. R. Dillon, 1501 S. 11th Ave., erect brick veneer residence, Gaymont Ave.; 1 story, 7 rooms; J. L. Williams, Contr.

Ala., Birmingham—Chas. Webb erect brick veneer residence, Mountain Brook Estates; 2 stories, slate roof, steam heat; Warren, Knight & Davis, Archts., 1603 Empire Bldg.; L. E. Ford, Contr., 2117 N. First Ave.

Ala., Ensley—W. A. Poindexter, 1877 Warrior Road., erect 2 brick veneer dwellings, 45th and 46th Sts. near M St.; 1 story, 36 x 47 ft., composition roof, cost \$6000 each; day labor.

Ala., Huntsville—First Baptist Church, erect 2-story parsonage; 9 rooms; Smith & Fisk, Contrs.

Ala., Montgomery—C. M. Owens, care Frank Lockwood, Archt., 119 Adams St., erect \$20,000 residence, Woodley Rd. and Woodley Terrace; hollow tile and stucco, 2 stories, 35 x 55 ft., asbestos roof, hardwood floors; T. I. Baker, Contr., 420 Carter Hill Rd.

Ark., Forrest City—W. W. Campbell erect \$12,000 brick veneer residence; 1 story and basement, 8 rooms, composition shingle roof, oak floors, tile bath, hot water heat, garage; Estes W. Mann, Archt., Cotton Exchange Bldg., Memphis, Tenn.; John A. Moore, Contr.

Ark., Pocahontas—Mrs. J. O. Sallee, N. J. Barthel and J. L. Pratt each erecting residence; frame, stucco and brick.

Fla., Jacksonville—A. J. Cone, 3518 Herschell St., erect 8 dwellings, Van Buren and Florida Sts. near Darwin St.; frame, 1 story; total cost \$11,300; W. O. Paschal, Contr.

Ga., Atlanta—Mrs. L. W. Marbury, 817 Ponce de Leon Ave., erect brick veneer residence, 717 Morningside Drive, N. E.; 1 story, cost about \$10,000; C. B. Eubanks, Contr., 355 Brooks Ave., N. E.

Ga., Atlanta—Mr. Blackman erect \$20,000 residence, W. Andrews Drive; 2 stories; Cooper & Cooper, Archts., Padgett & Sutton, low bidder, both Bona Allen Bldg.

Ga., Savannah—Clarke & Clarke Co., 16 E. Bryan St., erecting brick veneer dwelling, 48th St. near Paulson St.; 2 stories, tile roof, tile wainscoting in bath.

La., New Orleans—B. Segal, 2733 Pine St., plans 2-story duplex, Apricot St.; owner builds; work start about 30 days.

La., New Orleans—Jas. Lemons erect double cottage, Johnson St. near France St.; composition roof; Louis Green, Contr., 4022 N. Prieur St.

La., New Orleans—Mutual Building & Homestead Assn., Canal-Commercial Bldg., erect \$10,000 duplex, Elizabeth and Meadows Sts.; Jas. B. Murphy, Contr., Title Guarantee Bldg.

La., New Orleans—Peoples Homestead Assn., 327 S. Charles Ave., erect \$10,500 duplex, Louisiana Ave. and Carondelet St.

La., New Orleans—Hyman Rabinovitz, Contr., 740 Poydras St., erect single frame and stucco bungalow, Jena and S. Johnson Sts.

La., New Orleans—Rennod, Inc., erect 4 double cottages, Newton and Elmira Sts., total cost \$13,500; Chas. J. Donner, Contr., 604 Elmira St.

La., New Orleans—F. R. Gatti, 842 Taft Place, erect 2-story duplex, Broadway, near Apricot St.

La., New Orleans—I. Singer, 336 Baronne St., erect \$12,000 raised bungalow, Peters Ave. near Magnolia St.; slate roof, concrete tile roof; Lockett & Chachere, Archts., Title Guarantee Bldg.

La., Orleans—Adam Mulheisen erect \$21,800 frame building, Dryades and Andrew Sts.; Jacob T. Kirn, Contr., 3310 Cleveland St.

Md., Baltimore—Younger & Riddle, 4305 Ethland Ave., erect \$10,000 brick dwelling, 4406 Carview Ave.; 2 stories, 29x34 ft., slate roof, steam heat; owner builds.

Md., Baltimore—Geo. A. Stewart, 904 N. Charles St., let contract to L. L. Chambers, Inc., 36th St. and Roland Ave., for \$25,000 residence, St. Albans Way and Witherspoon Rd.; 2½ stories, 42x34 ft., brick, slate roof, vapor heat; Wm. Gordon Beecher, Archt., 12 E. Pleasant St.*

Md., Baltimore—J. Geo. Elerman, American Bldg., erect 4 brick dwellings, S. E. cor. Belair and Elerman Ave.; 2 stories; total cost \$19,000; plans construction by owner.

Md., Baltimore—Suburban Construction Co., Oakfield Ave. & Bonner Rd., erect 15 brick dwellings, 501-29 York Rd.; 2 stories, 18x32 ft., steam heat; total cost \$30,000; Harry Bast, Archt.; owner builds.

Md., Baltimore—E. S. Donaldson and others erect \$15,000 dwelling and garage, Bedford Place near Oakley Ave.; brick, 2½ stories, 40x27 ft. and 20x20 ft., slate roofs, hot water heat; M. E. Donaldson, Archt., 2209 Mandawmin Ave.; E. A. Cullings, Contr., 602 Gladstone St.

Md., Baltimore—Richard A. Frohlinger, 302 Traymore Rd., erect brick residence, St. Albans Way, near Charles St., Homeland; 2 stories, 67x45 ft., 13 rooms, 5 baths, 3-car garage; Peyton B. Strobel Co., Contr., Munsey Bldg.

Md., Baltimore—Jos. Pistorio erect 5 brick dwellings, S. W. Cor. Belair Rd. and Wilson Heights Ave.; 2 stories, 20x31 ft., slag roof; total cost \$10,000; Geo. Wessel, Archt., 601 W. 40th St.; owner builds.

Mo., Clayton, St. Louis—Samoto Realty & Building Co., 1205 Fullerton Bldg., erect \$20,000 dwelling, 809 Claytonia Terrace; brick, 2 stories and basement, 38x32 ft., 8 rooms, 2 tile baths, hardwood floors, tile roof, hot water heat; A. B. Ridington, Archt., 1205 Fullerton Bldg.; owner builds.

Mo., St. Louis—Mrs. Anna Kofron, care Ducommun & Dirks, Archts., 4908 Delmar Blvd., erect brick residence, City View; cost about \$10,000, stucco, 2 stories and basement, 29x29 ft., tile bath, hardwood floors, composition roof; owner builds.

Mo., St. Louis—J. J. Pitlyk, 5762 Union St., erect 3 brick dwellings, 5752-54-58 Vivian St.; 1 story, 26x44 ft., asphalt shingle roofs, hot air heat; total cost \$12,000; W. M. Smith, Contr., 1365 Montclair St.

Mo., St. Louis—E. J. Scally, 3947 Potomac St., has excavation contract for E. Battle Smith's residence, Normandy Heights; carpentry, Geo. Weber, 6317 Garesche Ave.; brick work, Ben Mayer, 2726-A Wyoming St.; plumbing, J. A. Lynch Plumbing Co., 1618 Chestnut St.; wiring, J. T. Kelly, 5088 Minerva St.; roofing, Hayden Slate Co., 2110-A Pine St.; heating, D. F. Edwards Heating Co., 2340 Pine St.; marble, E. H. Bradbury, Century Bldg.; plastering, Craig Plastering Co., Equitable Bldg.; millwork, Mechanics Planing Mill Co., 3742 N. Broadway; painting, G. T. Handge & Son, 3441 Pine St.; Bonsack & Pearce, Inc., Archts., Room 409-411 Olive St.; owner builds.*

Mo., St. Louis—E. T. De Grande, 3658 St. Mary St., Normandy, erect 5 brick dwellings, 4127-31-35-39-43 Miami St.; composition shingle roofs, hot air heat; total cost \$15,000; plans and construction by owner.

Mo., Springfield—J. Fred Long, 573 E. Walnut St., erecting \$16,000 residence, 1007 S. Boulevard; Bishopric white stucco, 2 stories, 28x54 ft., select hardwood floors, Johns-Manville slate roof; Wilmer Thompson, Loren and Roanoke Sts., and Robt. Louis Stevenson, Archts.; E. R. Skates, Contr-Engr., 805 S. Roanoke. See Want Section—Building Materials and Equipment.

Mo., University City, St. Louis—Geo. R. Lantz, 3309-A Potomac St., let contract for \$15,000 residence, West Point St., Alta Dena subdivision, to Emil Struckhoff, 7325 Wellington Ave.; brick, 2 stories, 31x39 ft., oak floors, slate roof, yellow pine and gum interior trim; Edw. Lantz, Archt., 207 Wainwright Bldg., St. Louis.*

N. C., Greensboro—R. I. C. Craftsmen Co., Battle Ground Rd., erecting \$10,000 brick veneer dwelling, Mendenhall and Courtland Sts.; cypress sheathing, pine frame, fir floors, 2 stories, 38x52 ft., asphalt roof; Wm. McC. Neale, Engr., 400 N. Mendenhall St.; owner builds; all materials and equipment purchased.*

N. C., Greensboro—First Realty & Loan Co., Southern Loan & Trust Bldg., erect two \$15,000 dwellings, Market St. near May-

flower Drive; brick veneer, 2 stories, 8 rooms, composition roof; J. N. Coe, Contr., 306 American Bldg.

N. C., Greensboro—J. H. Marley & Stout erect \$11,000 dwelling, Rolling Rd.; brick veneer, 2 stories, 9 rooms, composition roof; A. M. Mayer, Contr.

Tenn., Memphis—Dr. J. F. Biggs, 1941 Vinton St., let contract for \$10,000 residence, 261 Kimbrough St., to D. G. Wilson, 1446 Minna Place; brick veneer, 7 rooms, composition shingle roof, oak floors, tile bath, steam heat, frame garage.*

Tenn., Memphis—Dave Dermon, erect 2 brick veneer dwellings, 347-49 N. Watkins St.; 1 story and basement, 28 x 44 ft., composition shingle roofs, oak floors, tile bath, steam heat, frame garage; San Ettingoff, Contr., both Dermon Bldg.

Tenn., Memphis—Foster & Stevenson, First Nat. Bank Bldg., laying foundation for \$10,000 dwelling, 903 Barksdale St.; brick veneer, 1 story and basement, 32 x 52 ft., composition shingle roof, oak floors, tile bath, hot water heat, frame garage; Estes W. Mann, Archt., 203 Cotton Exchange Bldg.; J. B. Moody, Contr., 42 N. Clay Brook St.

Tenn., Memphis—Mrs. H. H. Twiford, 120 East Parkway, let contract to N. H. Morris for \$20,000 brick veneer residence, 550 East Parkway, South; 8 rooms, 1 story and basement, 76x48 ft., fireproof garage; Geo. Mahan, Jr., Archt., 700 American Bank Bldg.*

Tex., Dallas—Geo. Allen, 3316 Drexel St., erect brick veneer residence; 2 stories, 60x40 ft., 2 tile baths; Fonzie E. Robertson, Archt., 1609 Republic Bank Bldg.; Fred McQueen, 2904 Hall St., gen. contract at \$14,750.

Tex., Houston—H. C. Vogt, 812 Hawthorne Ave., completed foundation of \$12,500 dwelling by day labor; brick veneer, 2 stories, 36x30 ft., oak and tile floors, composition shingle roof; plans by owner. See Want Section—Building Materials and Equipment.*

Tex., Houston—A. W. Davis erect \$11,000 residence, 2605-07 Isabella St., Washington Ter.; 2 stories, 10 rooms; J. P. Lawrenson, Contr.

Tex., Houston—J. L. Du Ross, 2514 Whitney St., erect \$10,000 residence, 1124 Hyde Park Blvd.; brick veneer, 6 rooms; T. H. Spencer, Contr., 1305 W. Bell St.

Tex., Houston—J. W. Flagg, 1813 Kensington St., erecting \$20,000 residence, 1824 Kipling St.

Tex., Houston—J. M. Helser, 1908 Washington Ave., erecting \$15,000 brick veneer residence, 1735 Kipling St., Winlow Pl.

Tex., Houston—W. O. Kraft, First Natl. Bank Bldg., erecting \$15,000 residence, 2536 Oakdale St.; brick veneer, 7 rooms and bath; L. W. Lindsay, Contr., Second Natl. Bank Bldg.

Tex., Mineral Wells—Dick Locke erect \$16,000 residence and garage; brick veneer, 2 stories; E. C. Witherspoon, Contr.

Tex., San Antonio—Del Mar Corp., Tribble Bldg., Corpus Christi, reported merged with Carvel & Co., Frost Bldg., San Antonio; erect number dwellings in San Antonio and Lower Rio Grande Valley.

Tex., San Antonio—L. E. Fite & Co., 317 W. Travis St., plans about 98 dwellings, Parkmoor Place; frame and semi-permanent, total cost \$350,000; work on 15 start at once.

Tex., San Antonio—Frances Ostrom, 1910 Jones St., Contr., erect French village, Jones Ave. and E. Magnolia Ave., 30 villas in first unit, cost about \$250,000; Karren-Tobias Lumber Co., 1919 S. Flores St., to furnish building materials.

Tex., San Antonio—M. L. Apfel, 305 E. Magnolia Ave., let contract at \$10,249 to Wilkens & Rux for frame and stucco residence; plumbing, F. Wahrmynd, \$1342; wiring, Wright Bros., \$474; J. I. White, Archt., Houston Bldg.*

Tex., San Benito—Merlwether & Sauer, Harlingen, have contract for 2-story Spanish type model dwelling; W. D. Van Siclen, Archt., Brownsville.

Tex., Sherman—Miss Bessie Eubank let contract to J. A. Thompson for \$25,000 residence, 1211 N. Hopson St.; brick veneer, wood and concrete, 46x74 ft., 1 story, 8 rooms, slate roof; John Tulloch, Archt.; wiring, Robers Electric Co.; painting and decorating, Tom Armstrong.*

Va., Danville—Lloyd Fuller erect brick residence, Mount Vernon Ave.; 9 rooms; plans by owner; H. A. Osborn & Son, Contrs., Arcade Bldg.

Government and State

Ala., Speigner—State Board of Administration let contract to Hugger Bros. Construction Co., Shepherd Bldg., Montgomery,

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for extension to Speigner prison; cost \$25,000 to \$30,000. 31x131 ft., 2 stories, frame, accommodate about 200; material furnished by State.

Fla., Ralford—Tennessee Coal and Iron Co., Brown-Marx Bldg., Birmingham, Ala., has reinforced steel contract for \$300,000 State Penitentiary; final concrete finish. Cement Gun Co., Allentown, Pa.; air compressor for cement finish, Worthington Pump and Machinery Corp., 105 Cedar St., New York; iron columns, American Cast Iron Pipe Co., Birmingham; cement hardener, L. Sonneborn Sons, Inc., 114 Fifth Ave., New York; oil burners for bakery and heating boilers, W. S. Ray Manufacturing Co., Inc., San Francisco, Cal.; E. S. Hammett, State Engr., Tallahassee; other contracts previously noted; all labor by prisoners.*

Hospitals, Sanitariums, Etc.

Fla., Ocala—Zinni Tile Co. has floor and wall tile contract for \$150,000 Munroe Memorial Hospital; Geo. MacKay, Archt.; Fredk. Uezell, Asso. Archt., Robertson Block; Grahn Construction Co., Contr., 133½ Magnolia St., Daytona Beach.*

Mo., Kansas City—St. Marys Hospital erect nurses' home, 20th St. and Baltimore Ave.; Italian Renaissance type, 4 stories with foundation for 2 additional stories, 170 ft. wide, 108 rooms, chemical laboratory and classrooms in basement; Wilkinson & Crans, Archts., Interstate Bldg.

Tex., Corsicana—Dr. Shell remodel building for hospital; Coburn & Smith, Archts., 2006 Republic Bank Bldg., Dallas; Haslam Bros., gen. contract at \$18,654; plumbing and heating, C. A. Mullins, \$7457; wiring, Superior Electric Co., 409 S. Ervay St., Dallas, \$2165; marble, elevator and electrical fixtures not let.

Va., Burkeville—State Board of Health let contract at \$8718 to Taylor Manufacturing Co., Farmville, for addition to Service Bldg., Piedmont Sanatorium; brick and joists, 2 stories and basement, wood floors, brick foundation, composition roof; Chas. M. Robinson, Archt., 1002 Times-Dispatch Bldg., Richmond.*

Hotels and Apartments

Ala., Birmingham—Mrs. Mary Bailey erect \$10,000, 2-story, brick veneer, 16-room apartment house; owner builds; day labor.

Ala., Birmingham—C. H. McCauley, 709 Jackson Bldg., started work on \$30,000, 3-story, brick veneer, 30-room apartment house, 20th St. and 15th Ave. South; 35x60 ft., oak and tile floors, brick, concrete and hollow tile foundation, tile roof; A. Getman, steam heating; plans by owner; Paul Brothers, Contrs., 14 Bonita Drive.*

Fla., Jacksonville—Victor Zambetti, E. 14th St., owner and builder, excavating for \$80,000, 3-story, 16-apartment building.

Fla., Venice—George J. Berick started work on \$60,000 hotel building on the Rialto; 43 guest rooms, dining room seating 100, Spanish design; Harrison Gill, Archt.

Ky., Louisville—Apperson Lodge No. 195, A. F. & A. M. (See Contracts Awarded—Association and Fraternal.)

La., New Orleans—Service Building & Home Assn., 417 Baronne St., let contract to Denis & Handy, Perdido Bldg., for \$45,000 apartment building, Napoleon Ave. and Baronne St.

La., Ponchatoula—Richard McCloy let contract to Perrin & Anthony for 3-story, brick hotel building.

Mo., Kansas City—J. North Mehornay, 618 Huntington Rd., let contract to Mosby-Goodrich Construction Co., N. Y. Life Bldg., for 8-unit apartment building at 514 W. 12th St.

Mo., St. Louis—Heston Investment Co., 6819 Raymond St., let contract to J. D. Hesse & Son, 6819 Raymond St., for two \$12,500, 26x55 ft., 2-story, brick tenements, 4924-5 Potomac St.; tile roof, steam heat; plans by Contr.

Mo., St. Louis—J. C. Lamping, 3961 Delor St., erect two 2-story, brick, 34x45 ft. tenements, 1027-33 Art Hill Pl.; \$26,000, composition roofs, hot air heat; owner is Archt.-Builder.

Mo., St. Louis—St. Louis Homes Corp., 3119 N. Grand, erect \$17,000, 2-story, 87x47 ft. and \$10,000, 68x47 ft. tenements, 4062-68 Labadie St. and 2918-26 Sarah St.; composition tar and gravel roofs, hot air heat; Nolte & Nauman, Archts., 612 Fullerton Bldg.; owners build.

Mo., St. Louis—Esenay Realty Co., 1124 Chemical Bldg., erect \$22,000, 2-story, 60x51 ft., brick tenement, 1734-8 Pennsylvania St.; warm air heat; C. F. Schloemann, Archt.-Builder, 1253-A Amherst Place.

Mo., St. Louis—J. F. Fruhwirth, Ferguson, Mo., let contract to J. E. Jones, Overland, Mo., for \$14,000, 2-story, 38-48 ft. tenement, 4153 Lexington St.; composition roof, hot air heat.

Mo., St. Louis—J. E. Hoskins, 5514 Clemens St., erect two 2-story, 24x45 ft. brick tenements, 5640-2 St. Louis St., \$12,000; composition shingle roof; owner builds.

Mo., St. Louis—A. Stein, 7003 S. Grand St., erect \$25,000, 72x132 ft., 2-story, brick tenement, also \$1000, 20x122 ft., 1-story garage, 3653-63 Bates St. and 5542-4 37th St.; composition roof, steam heat; E. E. Christopher, Archt., 1221 Louderman St.; owner builds.

Mo., St. Louis—L. Kreienheder, 6608 Elmer St., erect two 2-story, 33x56 ft. brick tenements, 4917-23 S. Broadway; \$18,000, gravel pitch and tar roofs, furnace heat; owner is Archt.-Builder.

Mo., St. Louis—O. A. Scheielpeter, 2124 Adelaide St., let contract to G. Schock, same, for \$10,000, 2-story, brick, 23x46 ft. tenement, 4217 Shreve St.; composition shingle roof, hot air heat.

Mo., St. Louis—J. Lund, 4505 San Francisco St., let contract to C. E. Lund, same, for three 2-story, 23x41 ft., brick tenements, 4903-7-9 San Francisco St.; \$16,500, composition slate roofs, hot air heat.

Mo., University City, St. Louis—Queens Investment Co., 4533 N. Kingshighway, let contract to Charles Wilcox Construction Co., same, for \$10,000, 2-story, brick garage with attached brick garage, 7136-8 Amherst St.; asphalt shingle roof, hot water heat; T. L. Johnson, Archt., 6925 Columbia St.

N. C., Boone—Hodges & Smith, Contrs., plan to remodel old Watauga County jail into hotel.

Tenn., Knoxville—J. B. Reed, 2804 Magnolia St., let contract to H. E. Rogers, 900 Jackson St., for \$20,000, brick veneer, 20-room apartment house, E. Fifth Ave. and Chestnut St.

Tex., Amarillo—M. C. Hancock, 1018 W. Sixth St., awarded contract for \$45,000, 4-story, brick, 56x80 ft. store and apartment building.

Tex., Brownsville—Oscar Peterson let contract to H. L. Price & Co., for \$40,000, 50x80 ft., brick veneer, 16 three-room apartment building.

Tex., Galveston—Bellows-Maclay Construction Co., Kirby Bldg., Dallas, let following sub-contracts on \$500,000, 10-story and basement, 204-room Jean Lafitte Hotel: C. Wallace Plumbing Co., 2224 Summer St., heating and plumbing; Truscon Steel Co., 115 Field St., reinforcing steel; both Dallas; Alan T. Cooke & Co., Esperson Bldg., electric work; American Elevator Co., 2 elevators; both Houston; Southern Cement Products Co., 521 Mencha St., San Antonio, cast stone.*

Tex., Houston—B. F. Damon, West Bldg., let contract to Hugh Wilkin, 1708 Main St., for 6 brick veneer triplexes and 2 brick veneer duplexes; \$92,000.

Tex., Houston—Waddell House Furnishing Co., 1102 Prairie Ave., received contract for furnishing Lamar Hotel Co. building.*

Tex., Houston—J. J. Marker erecting \$10,000, 2-story, brick veneer apartment house, 401-5 71st St.

Va., Afton—Blue Ridge Terrace Co., Inc., started work on 3-story, stucco, 20-bedroom hotel; also erect 50 cottages, playground, camping site, etc., top of Blue Ridge Mountains on Jefferson Highway.

Va., Norfolk—Meredith & Tazewell, 26th and Hampton Blvd., started work on \$52,000, 12-family apartment house, N. W. cor. Westover and Colley Aves.; steel frame and brick, limestone trim, electrical refrigeration plant in each apartment.

Va., Wytheville—George Wythe Hotel Co., let contract to Morris Miller & Son, Christiansburg, at \$78,000, for 42-guest room, fireproof hotel; Frye & Stone, Archts., MacBain Bldg., Roanoke.*

Miscellaneous

Ala., Birmingham—C. G. McDuffee erecting \$35,000, 1 and 2-story, Spanish design studio building, Seventh Ave. North, to be occupied by Birmingham Conservatory of Music; Charles H. McCauley, Archt., Jackson Bldg.; J. L. Ward, Contr., 1326 N. 14th St.*

Fla., Vero Beach—Beachland Development Co., care J. H. Crawford, erecting \$75,000, 3-story, concrete, frame and stucco bathing casino and apartment building on Ocean front; half complete, concrete foundation, 50x100 ft. pool, equipment and furnishings cost \$12,000; Arthur W. Fleck, Archt.; Mil-

ler Construction Corp., Contrs., Farmers Bank Bldg.*

La., Baton Rouge—Female Protestant Orphans' Home, Mrs. Anthony Doherty, Chmn., Building Comm., let contract to Burkes & Haley, at \$33,500, for 2-story brick building; Jones, Roessle & Olschner, Archts., 324 Reynold Bldg.*

Ky., Louisville—B. W. P. Allen, 2514 W. Madison St., erecting \$40,000 building at 2516 Madison St. recreation rooms for negroes.

Md., Baltimore—Joseph B. Hauck, 928 Gorsuch Ave., erect \$20,000, 34x66 ft., 3-story, brick building, 949 Gorsuch Ave.; slag roof, steam heat; E. F. Torney, Archt., 341 E. 38th St.; J. J. Moylan, Builder, 338 N. Calvert St.

N. C., Raleigh—Catholic Orphanage started work on 4 new buildings, total cost of \$315,000; boys' school, boys' home, girls' orphanage and power house; fireproof, brick walls, reinforced concrete floors and stairs; plans by Rev. Father Michael Belmont, Southeastern Construction Co., Contrs., 210 N. Second St., Charlotte.

S. C., Columbia—Mechanics Constructing Co., Carolina Bank Bldg., erecting stands at baseball park; L. L. Propst, Pres. of Comers.

Tenn., Knoxville—S. & W. Cafeteria, Independence Bldg., Charlotte, N. C., renovating first floor of Journal Bldg. for cafeteria; Roehle & Gervin, Contrs., 517 W. Jackson St.*

Railway Stations, Sheds, Etc.

Okla., Boynton—J. H. Reddick, Kennedy Bldg., Fort Smith, Ark., Contr. for \$20,000 union station, let following sub-contracts: Millwork, Marshall Lumber Co., 429 N. Third St., Muskogee; painting, Haskett & Boring, Fort Smith; heating and plumbing, Muskogee Plumbing & Heating Co., 112 S. Fourth St.; brick, Boynton Brick Co.; steel, J. B. Klein Iron & Foundry Co., 1006 W. 2nd St.; roofing, Johns-Manville, Inc., 1209 W. 17th St., both Oklahoma City; sheet metal, William McLaughlin, Fort Smith.*

Tex., Harlingen—American Railway Express Co. let contract to T. J. Gelvin, 904 Jackson St., Houston, for \$25,000, Spanish type building.*

Schools

La., Baton Rouge—Everett School Supply Co., Third St., received contract to equip schools with desks and opera chairs at \$7000.

La., Tallulah—Madison Parish School Board let contract to Brashear & Ruddell, Delhi, at \$75,974, for 2-story school building; J. W. Smith, Archt., Ouachita Bank Bldg., Monroe.*

Miss., Columbus—Mississippi State College for Women, S. C. Fant, Pres., let contract to L. W. Hancock, 26th Ave., Meridian, at \$214,900 for administration and physical education building; P. J. Krouse, Archt., M. & W. Bldg., Meridian.*

Mo., Clayton, St. Louis—Clayton Board of Education has permit for \$111,000, 80x173-ft. brick school building, De Mun and Northwood Aves.; Tobin Construction Co., 1907 S. Crompton St., Contrs.

Mo., St. Louis—Board of Education, R. M. Milligan, Commissioner of School Buildings, let contract to Diekle Construction Co., Syndicate Trust Bldg., for \$203,000, 3-story, 162x77 ft. school building at 4166 Kingshighway Memorial Blvd.*

Okla., Clinton—Board of Education, C. W. Lowry, Sec., erect \$20,000 addition to school building; bonds just voted.

Tenn., Chattanooga—Fred B. Frazier, Commissioner of Education, City Hall, let contract to Rogers & Leventhal, Pound Bldg., for East Lake Junior High school; Key-James face brick to be used instead of stucco; W. C. Teas Co., 116 E. Eighth St., wiring; plumbing and heating to be let later; C. E. Bearden, Archt., First Natl. Bank Bldg.*

Tenn., Chattanooga—Fred B. Frazier, Commissioner of Education, City Hall, opened bids for new colored school, Peoples St.; Mark K. Wilson, Tenn. Electric Power Bldg., low bidder at \$98,941; contract let; Gordon Smith, Archt., Volunteer Bldg.

Tenn., Nashville—Montgomery Bell Academy, John Early, Greenwood Ave., Chmn., Board of Trustees, let contract to Boone Contracting Co., Independent Bldg., for \$50,000, 2-story, brick with stone trimming Administration Building; Bush Building Co., Eighth Ave., N., excavation; H. S. Vaughn, Arcade Bldg., brickwork; George Waller, Archt., Independent Bldg.*

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Tex., Houston—Board of Education, Houston Independent School District, let contract to M. C. Parker & Co., Inc., 2012 Magnolia St., for 2-story, reinforced concrete, 139 x 50 ft. Harvard Elementary School, Eighth and Harvard Sts.; maple and concrete floors, tar and gravel roof, concrete foundation; Barber Plumbing Co., heating and plumbing; Barden Electric Co., electric work; J. W. Dehnert, Archt., Kress Bldg.; Harry D. Payne, Supv. Archt., 1915 Norfolk St.*

Tex., La Porte—St. Mary's University, care C. E. Byrne, Bishop of Galveston, let contract to Thomas M. Murray, Houston, at \$68,360, including plumbing and electrical work, for 120x48 ft., reinforced concrete, brick and stone Kirwin Memorial Chapel; Maurice J. Sullivan, Archt., both Second Natl. Bank Bldg., Houston.*

Stores

Ala., Ensley, Birmingham—Gus Harduval let contract for several stores at 21st St. and Avenue E.

Ark., Little Rock—A. G. Cook, High Street Bakery Shop, started work on \$21,000, 2-story, 41x80 ft. store and apartment building, 1112 Battery St.; wood, tile and concrete floors, concrete foundation, built-up roof, equipment and furnishings cost \$10,000; Clyde E. Ferrell, Archt., 813 W. Third St.; C. L. Harlin, Contr., 412 Park Ave. (See Want Section—Building Materials and Equipment).*

Ga., Macon—Hatcher-Turpin Co., 523 Mulberry St., let contract to Chesa Jones, 25 Wall St., for two 2-story store buildings, 506-8 Second St.

Miss., Crystal Springs—Earnest Garland erecting 3 brick stores on Jackson St.

Miss., Osyka—Meyer & Neugass Co. making improvements; new plate glass front, new fixtures and equipment, interior changes.

Mo., St. Louis—Muriel Realty Co., 2010 N. Grand St., let contract to H. Kissels Sons, 4107 W. Florissant St., for \$35,000, 2-story, brick, 80x160x27x67 ft. stores and bowling alleys, Natural Bridge; composition roof.

Mo., St. Louis—S. R. Brenner, 3358 N. Union St., let contract to Arsenal Watson Co., 3358 N. Union St., for \$20,000, 2 and 3-story, 26x76 ft. stores and tenement, 2757-9 Chippewa St. and 3748-54 California St.; tar and gravel roof, steam heat.

Mo., St. Louis—Hampton Investment Co., 1105 Chestnut St., let contract to Duncan & Garrison Construction Co., 2622 S. 50th St., for \$20,000, 2-story, brick, 41x117 ft.

store and tenement, 5320-2 Natural Bridge and 3458-64 Williams Place; concrete roof, steam heat; M. D. Garrison, Archt., 4070 Lafayette St.

Okla., Tulsa—H. C. Stahl let contract to Molitor & Evarard, at \$15,123, for store and warehouse; M. C. Cross, Archt., 114½ E. Second St.

Tenn., Elizabethton—Joseph Strauss, Bristol, Va., let contract to J. W. Whited, Gate City, Va., for two \$10,000 to \$12,000, 24 x 80 ft., brick business buildings, on Elk Ave.

Tenn., Memphis—See Warehouses.

Tex., Amarillo—Denton Realty Co. let contract to S. F. Pelton, Massie Bldg., for \$15,000, 1-story, brick and tile store building; plumbing to Hugh Schuler, Fifth and Calhoun Sts.

Tex., Amarillo—C. L. Green, 112 E. Seventh St., and L. K. Patton, Amarillo Bldg., let contract to Albert Randall, Amarillo Bldg., at \$10,000, for 1-story, brick, 60x140 ft. business building; private plans.

Tex., Corsicana—F. N. Drane let contract to J. E. Metcalf & Son, at about \$40,000, for 2-story, brick and reinforced concrete store and office building.

Tex., Corsicana—E. L. Keith let contract to H. W. Carson, at \$11,000, for 1-story, brick and reinforced concrete store building.

Tex., Houston—J. H. Johnson, 1218 W. Gray St. erecting \$15,000, 1-story, 48x80 ft. store building, Taft and W. Gray Sts.; concrete floors and foundation, tar and gravel roof; J. C. Mitchell, 303 Stewart Bldg.; W. G. Wilson, Contr., 3603 Wallis St. (See Want Section—Building Materials and Equipment).*

Tex., Houston—A. R. Navarro, 1920 Carr St., let contract to J. A. Roberts, 603 Highland St., for \$20,000, 1-story, steel, hollow tile and brick store and garage building, Dallas and La Branch Sts.; 60x85 ft.; J. M. Glover, Archt., Bankers Mortgage Bldg.

Tex., McAllen—J. O. Richards, J. C. Hall and E. N. Everitt let contract to A. J. Ross, Edinburg, at \$61,234, for business building; A. H. Woodridge, Archt.

Tex., Sherman—J. A. McCampbell let contract to E. L. Thomas for 50x20-ft. brick store building.

Va., Norfolk—Levy-Page Corp., 107 City Hall Ave., expending \$30,000 remodeling and enlarging storerooms in Hotel Neddo building.

Va., Norfolk—David Pender, Pender Bldg., let contract to Logan McCloud for alterations to building at Brooke Ave. and Granby

St., drug store on first floor, upper 2 floors for offices, to be used by Norfolk College.

W. Va., Bluefield—S. S. Kresge Co., Detroit, Mich., let contract to H. A. Lucas, L. C. Bldg., for remodeling building; \$50,000; 1 story and basement, concrete and wood floors; W. A. Bodell & Co., Commerce St., heating and plumbing; Burgess Electric Co., Bland St., electric work; Harold Holmes, Archt., Penobscot Bldg.

Warehouses

Ala., Birmingham—Kaucher, Hodges & Co., Contrs., Shrine Bldg., Memphis, Tenn., let following sub-contracts on Merchants & Manufacturers Terminal: Reinforcing steel, Connors Steel Co., Empire Bldg.; structural steel, National Bridge & Iron Co.; miscellaneous and ornamental iron, Silvey Abeles Co.; steel sash, Detroit Steel Products Co., 2252 E. Grand Blvd.; roof and sheet metal, C. A. Bain, 1704 First Ave.; finish hardware, Butcher Tool & Hardware Co., 2018 Second Ave.; partitions, Turner Griffith Co., 416 N. 21st St.; fire doors, Kai-O-Mine, steel rolling elevator doors, Variety Fire Door Co., 2958 Carroll Ave., Chicago, Ill.*

Ky., Louisville—O. K. Storage & Transfer Co., 801 W. Main St., constructing first of 2 units of brick with Bedford stone trim warehouse, Barret Ave. and Broadway; \$150,000.*

Miss., Gulfport—Gulfport Furniture Co., 25th Ave., let contract to Chevally & Furbson for \$30,000, 1-story, brick, steel and concrete, 150x165 ft. warehouse and office building, 23rd Ave and 22nd St.; concrete floors and foundation; equipment and furnishings cost \$1500; Shourds & Stoner, Inc., Archts.*

Tenn., Memphis—Sears, Roebuck & Co., C. M. Kittle, Pres., Chicago, Ill. reported, let contract to B. W. Construction Co., 720 Cass St., Chicago, for 9-story, tower and basement mail order plant and retail department store; George C. Nimmons & Co., Archts., 122 S. Michigan Ave. and Martin C. Schwab, Engr., 30 N. Michigan Blvd., both Chicago.*

Tex., Edinburg—Ullman, Stearn & Krauss, Inc., Walnut and Dakota Sts., San Antonio, let contract to A. H. Lee, San Antonio, for 100x200 ft., sheet metal wholesale grocery building.*

Tex., Texarkana—Hunter Transfer & Storage Co., 319 E. Front St., let contract to A. B. Cupp for \$45,000, 3-story, mill construction, 65x120-ft. warehouse, 201-5 W. Elm St.; equipment and furnishings cost \$15,000; Witt, Selbert & Halsey, Archts., Texarkana Nat. Bank Bldg.*

WANT SECTION

Items in this department are published without charge and these columns are open for the publication of wants of all kinds relating to machinery, materials and supplies and construction work.

The items are classified as follows:

Machinery and Supplies

Includes requests for data, prices and literature and information on machinery, equipment, materials and supplies of all kinds.

Building Materials and Equipment

comprises all classes and kinds of materials and equipment used in construction projects of every description.

Bids Asked

by States, districts, municipalities, firms and individuals, for machinery, materials and supplies of all kinds and construction work.

Machinery and Supplies

Air Compressor.—Hackley Morrison Co., Inc. (Machy. Dealer), 204 N. Jefferson St., Richmond, Va.—Wants 900 cu. ft., 125 lb. A. C. motor-driven air compressor.

Alcunite.—Southern Desk Co., Hickory, N. C.—Wants prices on Alcunite for use in the manufacture of laboratory furniture.

Automobile Washing Equipment.—Superior Oil Co., F. B. Royster, Biloxi, Miss.—Wants prices on wash racks and systems.

Basket Weaving Machinery.—D. E. Piper, Fort Lauderdale, Fla.—Wants machinery for weaving fancy baskets and clothes hampers.

Beds (Door).—William Block, Contr., Okemah, Okla.—Wants prices on door beds for \$15,000 apartment house at Shawnee.

Boiler.—R. E. Boggs, Age-Herald Bldg., Birmingham, Ala.—Wants prices on one 220-h.p. H. R. T. boiler with metal stack and breeching, for Tennessee delivery.

Boiler.—A. B. Kelley, Greenwood, S. C., R. F. D. No. 5—Wants dealers' prices on 15-h.p. upright vertical fire-tube boiler, 100 lbs. working pressure.

Bucket (Clamshell or Orangepeel).—G. Y.

Carpenter, Richmond, Va.—Wants one-third-yard clamshell or orangepeel bucket.

Buckles (Belt).—Homer Wright, Instructor, South Hill High School, South Hill, Va.—Wants to correspond with manufacturers of belts and belt buckles for high schools and colleges with view to acting as distributor.

Concrete Block Machinery.—Roy E. Greenwald, Contr., Sidney St., Batesville, Ark.—Wants to correspond with manufacturers of machine to make concrete blocks, faced to represent brick construction.

Crane.—Pfaff & Smith Builders' Supply Co., 1007 Bullitt St., Charleston, W. V.—Wants used crawler type traction gas crane, 40 to 50 ft. boom, to handle 1½-yd. clamshell bucket; must be in good condition.

Drugs.—The Kil-Spray Co., Box 1355, St. Petersburg, Fla.—Wants to purchase the following in quantities for manufacture of insecticides:

Oil of Mirbane (Nitro-Benzole).

Oil of Eucalyptus (cheap substitute for oil eucalyptus).

Engine.—The Henry Walke Co., Robert S. Page, Pres., Norfolk, Va.—Wants 60-h.p.

crude oil or 2 or 4 cylinder marine engine, second-hand; state condition, etc.

Engines.—R. E. Boggs, Age-Herald Bldg., Birmingham, Ala.—Wants prices on cross compound condensing Corliss engine with or without condenser; not to have been in use over 12 or 18 months and in good condition; for Tennessee delivery.

Elevator (Electric).—A. L. Womack 15 7th St., Bristol, Tenn.—Wants good second-hand electric elevator for two store buildings.

Evaporator.—Phil J. Gormley, Box 235, Lexington, Ky.—Wants copper evaporating plan or high-speed copper evaporator containing from 300 to 500 ft. of heating surface; to be entirely of copper.

Excelsior Machinery.—R. A. Goolsby of Goolsby & Son Co., Denmark S. C.—Wants data and prices on the manufacture of excelsior, kind of wood suitable, machinery needed, etc.

Generator Sets.—R. E. Boggs, Age-Herald Bldg., Birmingham, Ala.—Wants prices on one gasoline-engine driven outfit, 50-kw. capacity, 3-phase, 60-cycle, 440 volts; prefer 4-cylinder engine direct connected and mounted on same with generator, Alabama

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delivery; one 157-kw. direct connected steam engine generator outfit, 3-phase, 60-cycle, 440 volts; must be comparatively new and first-class condition; Tennessee delivery.

Glass Specialties.—W. S. Crawford, Pres., Crawford Spoke and Handle Co., Mebane, N. C.—Wants data and prices on manufacture of small glass specialties, special shapes.

Handle Machinery (Broom).—J. H. Cooke, Atty., Sparks, Ga.—Wants machinery for making broom handles.

Heating Plant.—William Block, Contr., Okemah, Okla.—Wants prices on heating plant for \$15,000 apartment house at Shawnee.

Incinerators.—H. K. Gilbert, Mayor, Florence, S. C.—Wants data and prices in incinerators for disposal of garbage and dead animals.

Jewelry.—Homer Wright, Instructor, South Hill High School, South Hill, Va.—Wants to correspond with manufacturers of jewelry for high schools and colleges, with view to acting as distributor.

Laundry Machinery.—J. M. Freeman, Urania, La.—Wants prices and data on machinery for laundry for town of about 5000 persons.

Limestone Pulverizer.—Phil J. Gormley, Box 235, Lexington, Ky.—Wants one medium-size, first-class, used limestone pulverizer, complete.

Linoleum, etc.—Marine Corps, Quartermaster's Dept., Washington, D. C.—Receives bids March 11 to furnish 100 sq. yds. Battle-ship linoleum; 300 ft. extra heavy and 300 ft. turned edge linoleum binding; delivered f. o. b. Quantico, Va. Sch. 458.

Metal Working Machinery.—Paul D. Wooten, Conway, S. C.—Wants prices on machinery to make tobacco flues from sheet iron; either new or second-hand.

Overall Machinery, etc.—J. L. Tennant, Box 713, Lake Worth, Fla.—Wants machines for making overalls, work shirts and house dresses.

Parchment Paper.—H. L. McEwen, 1308 Grace Ave., Cincinnati, Ohio.—Wants data and prices on heavy type of parchment paper for making lamp shades.

Pipe Organ.—E. L. Robertson and L. R. Patterson, Archts., Calumet Bldg., Miami, Fla.—Prices on pipe organ for \$150,000 synagogue.

Rolls (Boiler Makers).—J. F. Foster, 294 Washington St., Boston, Mass.—Wants boiler-maker rolls of late type, second-hand.

Sewing Machines, etc.—Reliable Tent and Awning Co., Inc., 324 W. Reno St., Oklahoma City, Okla.—Wants prices on sewing machines and new factory equipment.

Sheet Iron.—Paul D. Wooten, Conway, S. C.—Wants prices on carlots of sheet iron used in making tobacco flues.

Ship Owners' Flags.—Leigh Bancroft, 224 Baronne St., New Orleans, La.—Wants to purchase chart, printed in color, showing ship funnels and flags.

Spray Guns.—The Kil-Spray Co., Box 1355, St. Petersburg, Fla.—Wants data and prices on spray guns for insecticides.

Sprinkler System.—E. W. Moise, Pres., Carolina Machinery Co., Sumter, S. C.—Wants data and prices on sprinkler systems.

Steel Tank and Tower.—Swartz & Everett, 911 Natl. Bank of Commerce Bldg., Norfolk, Va.—Wants 125,000-gal. steel tank and 75-ft. steel tower; consider good used equipment.

Tent and Awning Plant Equipment.—Reliable Tent and Awning Co., Inc., 324 W. Reno St., Oklahoma City, Okla.—Wants prices on general factory equipment.

Theater Equipment and Supplies.—J. E. Dunne, Pres., Temple Theater Corp., 127 W. Market St., Louisville, Ky.—Wants prices and data on theatrical and motion-picture equipment.

Tin Containers.—The Kil-Spray Co., Box 1355, St. Petersburg, Fla.—Wants prices on tin containers for insecticides.

Trenching and Tile Laying Machines.—W. H. Huffman, Sec., Cameron County Water Improvement Dist. No. 5, Brownsville, Tex.—Wants prices on trenching and tile-laying machines.

Wool Scouring Plant Machinery.—J. A. Williamson, 325 McCullough Ave., San Antonio, Tex.—Wants data and prices on machinery for wool scouring plant.

Bids Asked

Bridge.—St. Louis, Mo.—See Construction News—Bridges, Culverts, Viaducts.

Bridge.—State of Virginia will build two bridges. See Construction News—Roads, Streets, Paving.

Bridge.—San Antonio, Tex.—See Construction News—Bridges, Culverts, Viaducts.

Bridge.—State of Florida will build three bridges. See Construction News—Roads, Streets, Paving.

Bridge.—N. W. Green Sec., Tampa Subway Corp., 723 Stovall Professional Bldg., Tampa, Fla., invites proposals from contractors who are in position to assist in financing for toll bridge and vehicular tunnel, including:

- (1) **Dredging and Hydraulic Fill.**—1,500,000 cu. yds.
- (2) **Bridge.**—4 mi. reinforced concrete highway.
- (3) **Vehicular Tunnel.**—2500 lin. ft. reinforced concrete, under ship channel, in Hillsboro Bay.
- (4) **Bascule Bridge.**—110 ft. span, double-leaf bascule.
- (5) **Concrete.**—189,000 cu. yds.
- (6) **Reinforcing Steel.**—6800 tons.
- (7) **Piling (Pine).**—100,000 lin. ft.

Chestnut Poles.—Geo. H. Whitfield, Director of Public Utilities, Richmond, Va.—Receives bids March 15 for supply of chestnut poles.

Drains (Reinforced Concrete).—See Sewers.

Drains (Rectangular Brick and Concrete).—See Sewers.

Drain Tile.—See Sewers.

Fire Alarm System.—U. S. Veterans Bureau, Construction Div., Arlington Bldg., Washington, D. C.—Receives bids March 22 to furnish labor, equipment and materials for fire alarm system at U. S. Veterans Hospital No. 86, Sheridan, Wyoming.

Gas Mains.—City of Corpus Christi, Tex., P. G. Lovenskiold, Mayor.—Receives bids March 9 for excavation, laying and backfilling about 13,600 ft. 6-in. and 4-in. mains.

Gates (Rolling Lock).—U. S. Engineer Office, Pittsburgh, Pa.—Receives bids March 16 to furnish and deliver three rolling lock gates; one at Lock No. 2, one at Lock No. 20, Ohio River; one at Lock No. 1, Muskingum River.

Grading.—Baltimore, Md.—See Construction News—Roads, Streets, Paving.

Incinerator.—C. C. Pashby, City Clerk, Memphis, Tenn.—Receives bids March 11 to furnish labor, materials, hauling, tools and to construct garbage and refuse destructor; concrete brick and steel, fireproof throughout; City to furnish property; Rowlett Paine, Mayor.

Lamp Posts.—Board of Awards, F. A. Dolfield, City Register, Baltimore, Md.—Receives bids March 16 to furnish and deliver cast iron lamp posts to Div. Lighting; C. F. Goob, Mechanical Engr.

Lime (Caustic).—Board of Awards, F. A. Dolfield, City Register, Baltimore, Md.—Receives bids March 9 to furnish and deliver 1500 tons caustic lime to Bureau of Water Supply; Geo. F. Wiegardt, Water Engr.

Lock.—U. S. Engineer Office, Pittsburgh, Pa.—Receives bids March 9 to construct Lock No. 6, Allegheny River.

Lumber (Creosoted).—Vermillion Parish Police Jury, Abbeville, La.—Receives bids March 15 to furnish, f. o. b. Abbeville, approximately 41,000 lb. B.M. long-leaf yellow pine lumber, creosoted 10 lbs. to cu. ft.

Lumber.—Marine Corps, Quartermaster's Dept., Washington, D. C.—Receives bids Mar. 11 to furnish lumber; delivery Quantico, Va. Sch. 457.

Miscellaneous Supplies.—Panama Canal, A. L. Flint, General Purchasing Officer, Washington, D. C.—Receives bids March 16 for following: Blank forms (Circular 1788) obtainable Panama Canal Asst. Purchasing Agents, 24 State St., New York; 611 Gravier St., New Orleans; Fort Mason, San Francisco, Cal.; also U. S. Engineers throughout country:

Steel cabinets; insulated wire, steel conduit; dry cells; transformers; switches; sockets; shovels; scythes blades; reamers; fiber baskets; paints; varnishes; hydrochloric acid; sodium chlorate; liquid coal tar; pencils and paper, etc.

Paper Box Blanks, Paper, etc.—Treasury Dept., Bureau of Engraving and Printing, Washington, D. C.—Receives bids April 1 to furnish paper box blanks, paper and check paper during fiscal year beginning July 1, 1927; A. W. Hall, Director.

Piers (Bridge).—Salisbury, Md.—See Construction News—Bridges, Culverts, Viaducts.

Paving.—Sebring, Fla.—See Construction News—Roads, Streets, Paving.

Pipe (Vitrified).—See Sewers.

Pipe (Cast Iron).—See Water Main Extension.

Pipe (Galvanized).—See Sewers.

Pipe (Cast Iron).—See Sewers.

Power Plant Equipment.—U. S. Engineers Office, Louisville, Ky.—Receives bids March 22 for all labor and materials, furnishing and

installing machinery and piping in power house and turbine pit; piping in pipe trenches, installing gate and valve-operating machinery at Lock and Dam No. 47, Ohio River; information on application.

Pump House.—See Sewers.

Pumps.—See Water Works.

Pump House.—See Water Works.

Railroad Car Materials.—Norfolk and Western Ry. Co., Clyde Coker, Purchasing Agent, Room 351, N. and W. Ry. Bldg., Roanoke, Va.—Receives bids March 9 for 201 cast steel side frames, Contr. Serial AA-452, and 150 cast steel truck bolsters, Cont. Serial AA-453.

Road.—Houston, Tex.—See Construction News—Roads, Streets, Paving.

Road.—State of Virginia will build six roads. See Construction News—Roads, Streets, Paving.

Road.—Gainesville, Fla.—See Construction News—Roads, Streets, Paving.

Road.—Olney, Tex.—See Construction News—Roads, Streets, Paving.

Road.—Bronson, Fla.—Will improve three roads. See Construction News—Roads, Streets, Paving.

Road.—St. Augustine, Fla.—Will build or improve two roads. See Construction News—Roads, Streets, Paving.

Road.—State of Florida will pave and grade 10 roads. See Construction News—Roads, Streets, Paving.

Rubber Dam.—U. S. Veterans Bureau, Supply Division, Washington, D. C.—Receives bids March 7 for 50 rolls rubber dam, medium weight, in rolls about 5 in. by 21 ft.

Sewers.—City of Tampa, Fla.—Receives bids March 15 for sanitary sewer system on various streets, including concrete and cast iron pipe, Y's, manholes, etc.

Sewers.—City of Fort Thomas, Ky., Roland R. Pyne, Engr.—Receives bids March 14 for furnishing materials and building complete 50,000 ft. of 8 in. and 12 in. sewer, together with appurtenances.

Sewers.—Board of Awards, Baltimore, Md.—Receives bids March 9 for building storm drains and sanitary sewers in miscellaneous sewer districts in city, Storm Water Contract No. 102; Milton J. Ruark, Sewerage Engr.; work includes reinforced concrete pipe drain, rectangular brick and concrete drain, vitrified pipe sewer, house connections, manholes, etc.

Sewers.—Board of Public Service, St. Louis, Mo.—Receives bids March 8 for Section A, Western Mill Creek Public Relief sewers, two plans, No. 1 and No. 2, prepared, following materials required for:

No. 1—Brick Masonry, 100 cu. ft.; concrete, 600 ft. of Class B and C; excavation, 2030 cu. yds. of A, B and C; lumber; 55,000 ft. b.m.; pavement, 45 sq. yds. water bound macadam pavement and Telford base, 60 sq. yds. vitrified brick surface and bedding course, 195 sq. yds. refined asphalt surface and bedding course, 200 sq. yds. concrete foundation for pavement, 30 sq. ft. restoring granitoid sidewalks; tunnel, Type 13A, 3461 ft. complete as follows: 100 ft. 13B, 100 ft. 12C, 315 ft. 9A, 100 ft. 9B, 100 ft. 9C, 500 cu. yds. excavation, 15,000 cu. ft. class A concrete, 5000 lbs. reinforcing steel, 324 ft. earth sect. for 10x10 ft. and 15 ft. x 15 ft. shafts complete; sewers, 8 ft. 36 in. and 27 ft. 70 in. complete sewer of brick or segment tile block, 38 ft. 75 in., 90 ft. 9 in. completed sewer horseshoe shape of reinforced concrete, 20 ft. fill.

No. 2—Excavation, 2550 cu. yds. class A, B and C excavation; concrete, 600 cu. ft. class B and C; masonry, 100 cu. ft. of brick masonry; sewer, 46 ft. 12 in. sewer pipe, 27 ft. 24 in., 8 ft. 36 in., 16 ft. 60 in. completed sewer of brick or segment tile block, 27 ft. 75 in., 90 ft. 9 in. completed sewer horseshoe shaped of reinforced concrete, 20 ft. fill; lumber, 55,000 ft. b.m.; pavement, 45 sq. yds. water bound macadam pavement and Telford base, 65 sq. yds. vitrified brick surf and bedding course 270 sq. yds. refined asphalt surface and binder course, 30 sq. ft. restoring Granitoid sidewalks, 340 sq. yds. concrete foundations for pavements, 3461 ft. Type 13A tunnel complete, 100 ft. 13B, 100 ft. 13C, 3818 ft. 9A, 100 ft. 9B, 100 ft. 9C, 2039 7A, 100 ft. 7B, 100 ft. 7C, 500 cu. yds. excavation, 15,000 cu. ft. class A concrete, 5000 lbs. reinforcing steel, 175 ft. earth section for 10x10 ft. and 10 ft. x 16 ft. shaft complete, 321 ft. of rock section for 7 ft. x 9 ft., 10 ft. x 10 ft., and 10 ft. x 16 ft. shaft complete.

Sewers.—City Commn., Jacksonville, Fla., W. E. Shedd, City Engr.—Receives bids March 22 on portion of storm and sanitary sewer work; \$660,000 available.

In writing to parties mentioned in this department it will be of advantage to all concerned if the Manufacturers Record is mentioned.

Sewers.—City of Campbell, Mo., W. D. Beasley, Mayor.—Receives bids March 10 for furnishing materials, forms, labor and equipment, etc., for constructing sanitary sewers system and disposal plant, including following:

(1) **For Sewerage System**—37,600 feet of trenching; 37,600 ft. of sewer pipe, 8 in. to 12 in.; 705 Y connections; 73 manholes; 19 flush tanks; 1300 ft. of $\frac{1}{4}$ -in. galvanized pipe.

(2) **Disposal Plant**—115 cu. yds. of reinforced concrete; 15,500 lbs. reinforcing steel, 2 tons Class A cast iron pipe; 1000 lbs. special castings; two 12-in. sluice valves; one 10-in. gate valve; 875 ft. of 12-in sewer tile; 50 ft. 6-in. and 4-in. drain tile; 15 cu. yds. of sand and gravel; 1 special by-pass manhole; 1 pump house, complete; 2 vertical centrifugal sewerage pumps, 150 gals each; small pipe, fittings, valves and erection complete electrical connections.

Sewers.—City of Nashville, Tenn., Hilary E. Howse, Mayor.—Receives bids March 8 for constructing several trunk and lateral sanitary sewers, trench excavation 30,000 cu. yds.; circular trunk sewer 30 in. to 36 in. diam., inclusive, total 12,500 ft.; pipe sewers from 8 in. to 24 in. diam., inclusive, 40,000 ft.; also receive bids same time for vitrified clay sewer pipe, A.S.T.M. standard specifications and both both steel, reinforced and plain concrete sewer pipe, modified A.S.T.M. standard specifications, 50,000 ft. of sewer pipe, 8 in. to 36 in. diam.

Sewers.—City of Eufaula, Ala., H. H. Conner, Mayor.—Receives bids March 15 for material, labor and equipment and constructing sanitary sewerage, approximately 5500 ft. 8-in. terra cotta pipe, with cuts from 6 to 14-in ft., all necessary manholes, flush tank devices, house connections and appurtenances; H. S. Jaudon Engineering Co., Engrs., Elberton, Ga.

Spark Plugs.—Marine Corps, Quartermaster's Dept., Washington, D. C.—Receives bids March 7 to furnish 6000 spark plugs; delivery Philadelphia, Pa. Sch. 452.

Steel (Reinforcing).—See sewers.

Street.—San Antonio, Tex.—See Construction News—Roads, Streets, Paving.

Street.—Midland, Tex.—See Construction News—Roads, Streets, Paving.

Valves.—See Sewers.

Vehicular Tunnel.—See Bridge.

Well Drilling.—See Water Works.

Water Main Extension.—City of Vero Beach, Fla., B. T. Redstone, Mayor; Carter & Damerow, Inc., Engrs.—Receives bids March 17 for purchase and installation of 7000 ft. of 6-in. and 20,000 ft. of 8-in. cast iron main, 20 hydrants, 24 valves and boxes.

Water Pipe and Castings.—Board of Supervisors Arlington County, Clarendon, Va.—Receives bids March 7 for furnishing 80,000 ft. of 8, 12 and 24 in. cast iron water pipe and special castings; specifications from Asa E. Phillips, Ch. Engr., Arlington County Water Supply, 2523 Pennsylvania Ave., Washington, D. C.

Water Works.—City of Snyder, Tex., H. G. Towle, Mayor; Hawley & Roberts, Consult. Engrs., Box 1115, Lubbock, and 403 Cotton Exchange Bldg., Fort Worth.—Receives bids March 8 for materials, labor and whatever may be necessary for constructing following: Contract No. 1, drilling, casing, screening, developing and testing one water well about 150 ft. deep, 18 in. or 24 in. in diam.; overhauling two Smith-Vale $7\frac{1}{2}$ x8-in. triplex, motor-driven power pumps at city water plant; furnishing and installing with proper gears two 25-h.p. induction motors and starters, with wiring complete, pinions and gears to make triplex pumps deliver 250 g. p. m.; furnishing and installing two 3-h.p. induction motors for well pumps; furnishing and installing, with complete water and electrical connections ready for service, one 500 g. p. m. at 170 ft., total head centrifugal pump with 2200-volt induction motor and starter; constructing complete one concrete foundation for pump and motor and extension to present pump house.

Water Works.—Board of Comrs. of Water Works Improvement District No. 2, Marianna, Ark., O. C. Sutton, receives bids March 10 for improvements, including distribution system, filter plant, pumping station, filter equipment, reservoir, fire pumps, circulating pumps, station piping and wiring and building for deep-well pumps; Thos. H. Allen, Engr., Bank of Commerce and Trust Bldg., Memphis, Tenn.

Water Works.—City of Franklin, Ky., P. E. Lewis, Mayor; Klyce & Harrib, Engrs., 705 Fourth and First National Bank Bldg., Nashville, Tenn.—Receives bids March 15 for: (1) **Filter Units**—furnishing and installing equipment for two rapid sand gravity type filter units, each 500,000 gal. daily capacity.

(2) **Filtration Plant**—concrete work for complete filtration plant, 1,500,000 gal. daily capacity, installation of pumps (except wash-water pump), water mains and miscellaneous items.

(3) **Pumps (Centrifugal)**—furnishing three motor-driven, 1,000,000 gal. centrifugal pumps and one 3,000,000 gal. centrifugal pump.

(4) **Tank and Tower (Steel)**—furnishing and erecting elevated steel tank of 100,000 gal. capacity.

Waterproofing and Caulking.—Board of Awards, Frederick A. Dolfield, City Register, City Hall, Baltimore, Md.—Receives bids until March 9 for waterproofing all exterior brick and cast stone surfaces above grade, caulking all exterior windows and doors and metal windows on Forest Park Senior and Junior High School and Shop Building; specifications at office Supv. Engr., 518 Hearst Tower Bldg.

Building Materials and Equipment

Dr. P. H. Askew, Nashville, Ga., wants prices on following for \$40,000 hotel:

Flooring—hardwood.

Metal Ceilings.

Plaster Board.

Roofing—composition and tile.

Steel Sash and Trim.

Tile—hollow.

J. Fred Long, 573 E. Walnut St., Springfield, Mo., wants prices on following for \$16,000 residence:

Refrigerators—electric.

E. L. Robertson and L. R. Patterson, Archts., Calumet Bldg., Miami, Fla., wants prices on following for \$150,000 synagogue:

Rolling Partitions.

Seating.

Steel Sash and Trim.

H. C. Vogt, Bldr., 812 Hawthorne Ave., Houston, Tex., wants prices on following for \$12,500 dwelling:

Flooring—hardwood, linoleum, tile.

Heating—gas-fired hot-air furnace.

Roofing—composition.

J. H. Johnson, 1218 W. Gray St., Houston, Texas, wants prices on following for \$15,000 store:

Metal Ceilings.

Hart, Freeland & Roberts, Archts., Ind. Life Bldg., Nashville, Tenn., wants prices on following for brick dwelling:

Flooring—hardwood, tile.

Refrigerators—electric.

Roofing—composition, tile.

Tile—interior.

Major E. C. Lehr, U. S. P. & D. O., Mississippi National Guard, Vicksburg, Miss., wants prices on following for buildings for National Guard Camp, Biloxi, Miss.:

Incinerators.

Refrigerators—electric.

Roofing—composition.

Ventilators.

Porter Memorial Baptist Church, Rev. A. L. Goodrich, Pastor, 730 S. Limestone St., Lexington, Ky., wants prices on following for \$50,000 to \$60,000 auditorium:

Church Equipment.

Dr. John B. Thomas, care of David S. Castle Co., Archt., Abilene, Tex., wants prices on following for \$110,000 office building, Midland, Tex.:

Cast Stone.

Flooring—composition, linoleum, rubber tile, terrazzo, tile.

Limestone.

Mail Chutes.

Marble.

Sprinklers.

Steel Sash and Trim.

Ventilators.

Leo M. J. Dielmann, Archt., 306 E. Commerce St., San Antonio, Tex., wants prices on following for \$180,000 gymnasium at St. Mary's College:

Steel Sash and Trim.

Tile—hollow.

Wire Glass.

Allison-Russell-Withington Co., 2026 4th Ave. N., Birmingham, Ala., wants prices on following for \$18,000 dwelling:

Cast Stone.

Flooring—hardwood, linoleum

Incinerators.

Refrigerators—electric.

Roofing—composition.

Steel Sash and Trim.

F. L. Bowron, 303 Kentucky Ave., Umatilla, Fla., wants prices on following for \$12,500 clubhouse:

Brick.

Cement.

Flooring—hardwood, linoleum.

Plaster Board.

Roofing—composition, tile.

Tile—hollow, interior.

Ventilators.

Wire Glass.

Henry Clay Hotel Co., 335 16th St., Ashland, Ky., wants prices on following for \$500,000 hotel building:

Cast Stone.

Dumb Waiters.

Flooring—terrazzo and tile.

Incinerators.

Limestone.

Marble.

Metal Doors.

Roofing—composition.

Terra Cotta Trim.

Tile—hollow and interior.

Ventilators.

Wire Glass.

C. L. Harlin, Contr., 412 Park Ave., Little Rock, Ark., wants prices on following for \$21,000 store and apartment building:

Cast Stone.

Flooring—concrete, hardwood, tile and wood.

Incinerators.

Metal Ceilings.

Refrigerators—electric.

Roofing—composition.

Tile—hollow.

Book Reviews

The Financial Policy of Corporations. By Arthur Stone Dewing. Revised Edition. New York: The Ronald Press Company, 1926. Cloth. Gilt. Pp. 1281. \$10.

The author of this comprehensive work is associate professor of finance at Harvard University. It has been enlarged, as well as revised, and it constitutes an acknowledged authority among men concerned with questions involving the financial structure and capital policies of business organizations. It covers practical questions which come up sooner or later in the life of every company, problems which call for the application of sound, discriminating judgment if the business is to be completely successful in a financial way. For example, it deals with determinations as to whether stock or bonds should be issued to secure required capital; how to get the securities in the hands of investors in an economical way; how to set dividend and reserve policies for keeping the invested capital intact; how to readjust the capital plan in the event of a failure or other reorganization, and how to make out an investment program. There are also considered problems which involve in their handling the interrelation of finance, of law and of accounting. It is an all-around volume that will be widely appreciated and employed.

Procedures in Employment Psychology. By Walter Van Dyke Bingham and Max Freyd. Chicago and New York: A. W. Shaw Company, 1926. Pp. 269. Fabrikoid, Gilt.

This is a manual which outlines a procedure for developing, evaluating and installing measurement methods in vocational selection. It explains how to conduct vocational tests and how to determine their reliability and validity. The construction and validation of rating scales, interest questionnaires, application forms, interview methods, and similar devices used in determining aptitudes, also come within its scope. The technique here formulated is based on the accumulated knowledge of many specialists as well as on the author's experience. The treatment presupposes familiarity with personnel administration, psychology, mental test technique and statistical methods. The intention has been to include what would be useful to industrial research workers and to executives who want to know at first hand what is really involved in a thoroughgoing program for developing improved means of selection for a given occupation. The book is planned also for use in connection with college courses in vocational psychology. It is an impressive treatment of its subject, and it will doubtless be widely appreciated and used.

In writing to parties mentioned in this department it will be of advantage to all concerned if the Manufacturers Record is mentioned.

INDUSTRIAL NEWS OF INTEREST

Items of news about industrial, railroad or financial interests, building operations, construction work, municipal improvements, or the sale of machinery or the letting of contracts in the South or Southwest, are invited from our readers whether they are advertisers, or subscribers, or not. We invite information of this character from readers in the North and West about their Southern business operations, as well as from Southern readers. News of value will be published just as readily when from non-advertisers as from advertisers.

New York Life's Big Year.

Elsewhere in this issue appears the eighty-second annual statement of the New York Life Insurance Company, of which Darwin P. Kingsley is president. It shows that during the year 1926 the company wrote new insurance of more than \$900,000,000 and that the total insurance in force is more than \$5,750,000,000; also that there has been paid to members and beneficiaries over \$133,000,000, including over \$53,000,000 in dividends. The total income in 1926 was \$295,341,937.98. Total assets of the company now amount to \$1,267,065,866.04. The number of policies at the close of the year was 2,220,784, and President Kingsley says to the policyholders: "If you and your families could be brought together, you would populate one of the largest cities in the world. What a city it would be, with every family striving to safeguard its own future through a single co-operative institution for insurance and savings!" The statement contains many other suggestions of interest and of practical value to all. It cannot be read by anyone without profit. The data as to the life value of the average American is very enlightening.

Republic Iron and Steel Report.

The twenty-seventh annual report of the Republic Iron and Steel Company, Youngstown, Ohio, for the year ended December 31, 1926, has been published. It shows total profits for the year \$8,442,680.82 and net profits of \$5,065,022.37 after provision for depreciation and renewal of plants and exhaustion of minerals and interest and discount on bonds and notes. The net surplus at the end of the year was \$34,836,162.73, which compares with \$33,562,388.54 a year ago. The volume of business was satisfactory, although full capacity was not employed. As a result of the acquisition of one-half interest in the properties of the Susquehanna Mining Company, the Pettit Mine leases were surrendered; furthermore, 1010 Southern beehive coke ovens at Birmingham, Ala., and No. 1 Haselton blast furnace at Youngstown, Ohio, were replaced by more modern equipment.

Consulting Engineer Appointed.

Joseph Breslove, Oliver Building, Pittsburgh, Pa., has been retained as consulting engineer for the erection of a 25-story addition to the present William Penn Hotel in that city, for which work plans have been completed and contracts will be awarded as rapidly as details can be developed. The addition will contain 1000 rooms; also a great banquet hall seating 2000 persons, on the main floor, besides numerous dining rooms, lounging rooms, etc.

Hell Company's Detroit Branch.

The Hell Company of Milwaukee, Wis., on February 15 opened a branch office, sales and service station at Detroit, Mich., and Roy L. Dierckmeier, formerly manager of the company's branch in Minneapolis and St. Paul, Minn., will supervise the organization of the new Detroit district. The company will maintain there a stock of steel dump bodies, hydraulic hoists, hand hoists and compartment truck tanks, as well as a stock of service parts.

Whiting Corporation Sales Changes.

The Whiting Corporation, Harvey, Ill., manufacturer of cranes, foundry equipment and railway specialties, has made changes in its sales organization as follows: R. H. Bourne, formerly vice-president and sales manager, is now senior vice-president and will devote practically his entire time to the Grindle Fuel Equipment Company and the Joseph Harrington Company lines. N. S. Lawrence, formerly vice-president and assistant sales manager, is now vice-president and sales manager in charge of sales for the Whiting Corporation and the Swenson Evaporator Company lines. Mr. Lawrence will be assisted by A. H. McDougall, vice-president and consulting engineer, and R. E. Prussing, vice-president in charge of district offices and agents.

Paramount Ink Company.

The Paramount Ink Company of Shreveport, La., with its headquarters in Agurs, a suburb of that city, is producing a patented writing ink which is claimed to be acid proof and non-corrosive. It is stated that it is impossible to erase this ink with acids or any other chemical. It is further stated that the ink is especially valuable for legal records and documents and that it is also suitable for use in fountain pens. The ink is either blue or blue-black. The company also manufactures a full line of inks of various colors which are non-corrosive. Clarence A. Ricou is president and general manager; J. S. Jolley, vice-president, and John Jolley, Jr., secretary and treasurer.

Lidgerwood Branch at Jacksonville.

The Lidgerwood Manufacturing Company of New York city has established an office and warehouse at Jacksonville, Fla., the address there being 401 Barnett National Bank Building. This new office will be in charge of L. C. Hastings, who has been traveling in Jacksonville sales territory for several years selling the Lidgerwood line of hoists, cableways, derricks and log skidding machines.

Book Reviews

Advertising Research. By Percival White. New York and London: D. Appleton & Company. 1927. Pp. 507. Cloth. Gilt. \$6.

This is not merely another book concerning the theory of advertising. Mr. White has the attitude of a scientist and deals with the problems of advertising in a scientific manner and divides the subject accordingly. He tries to show the student how to deal with any advertising problem, excepting the supreme one of creating advertising, which is not susceptible to treatment by rule and precept. His instructive matter tends toward eliminating waste and inefficiency. The volume opens with a section on scientific procedure applied to advertising, reviewing the whole territory to be covered. The second section takes up product analysis, the study of the commodity to determine the appeals by which it is to be advertised. The next section treats of the market where it is to be sold, and here are studied consumers, analysis, market analysis and media

research. These subjects thus far discussed provide a foundation of plans for an advertising campaign. The procedure of planning a campaign is next outlined. The last major section of the book discusses fully the scientific method as applied to the production of advertisements, etc.

Tax Diary and Manual for 1927. New York: Prentice-Hall, Inc. 1926. Pp. 234. With Diary Addition Complete. Fabrikoid. \$5.

This year's issue of Prentice-Hall's Tax Diary and Manual, like previous editions of this annual, impresses the reader immediately as of distinctive character. It gives a digest of all corporation, inheritance and personal income taxes of the various States, besides outlines on Federal income tax, stamp tax, excise tax, dues and admission tax. Under State corporation taxes, for example, are shown what States impose a tax on corporations as such, what tax reports, returns and payments should be made and the basis of each tax. A digest on inheritance taxes contains a valuable chart, with the tax rates for each State and each class of beneficiary. Of particular interest to those interested in the settlement of estates is the summary showing how each State taxes the stock of corporations incorporated in or owning property within that State, and what exemptions are allowed residents and non-residents. Material relating to State income taxes on individuals was prepared especially for this book and is one of its leading features. There are also new features in this year's edition.

How to Do Research Work. By W. C. Schluter, Ph. D. New York: Prentice-Hall, Inc. 1926. Pp. 137. Buckram. \$1.25.

This book is a manual of research procedure presenting a simple explanation of the principles underlying research methods. It concisely shows the various steps of an investigation and clearly explains how each step may be applied. All told, there are fifteen steps which provide a framework upon which to build a research, and one of the many valuable features of the work is the discussion covering the mental point of view of the person doing research work. Even to those who are already familiar with research procedure the author offers suggestions for improved methods and new viewpoints. Conditions, viewpoints, bases for illustration, and so forth, vary with each field, but the method in each—though it might be specialized in detail of procedure—would nevertheless be substantially the same, viz., the systematic direction of the creative faculties in the manipulation of data for the solving of problems; a constructive method of inquiry following certain recognizable principles. This is a valuable handbook for anyone undertaking research in any field.

Business Consultant.

Henry F. Baker, 900 St. Paul St., Baltimore, Md., has sent out cards announcing his services as business consultant and adviser. Industrial propositions are investigated and advice given respecting organization and sales problems. He also acts as trustee, receiver or arbitrator.

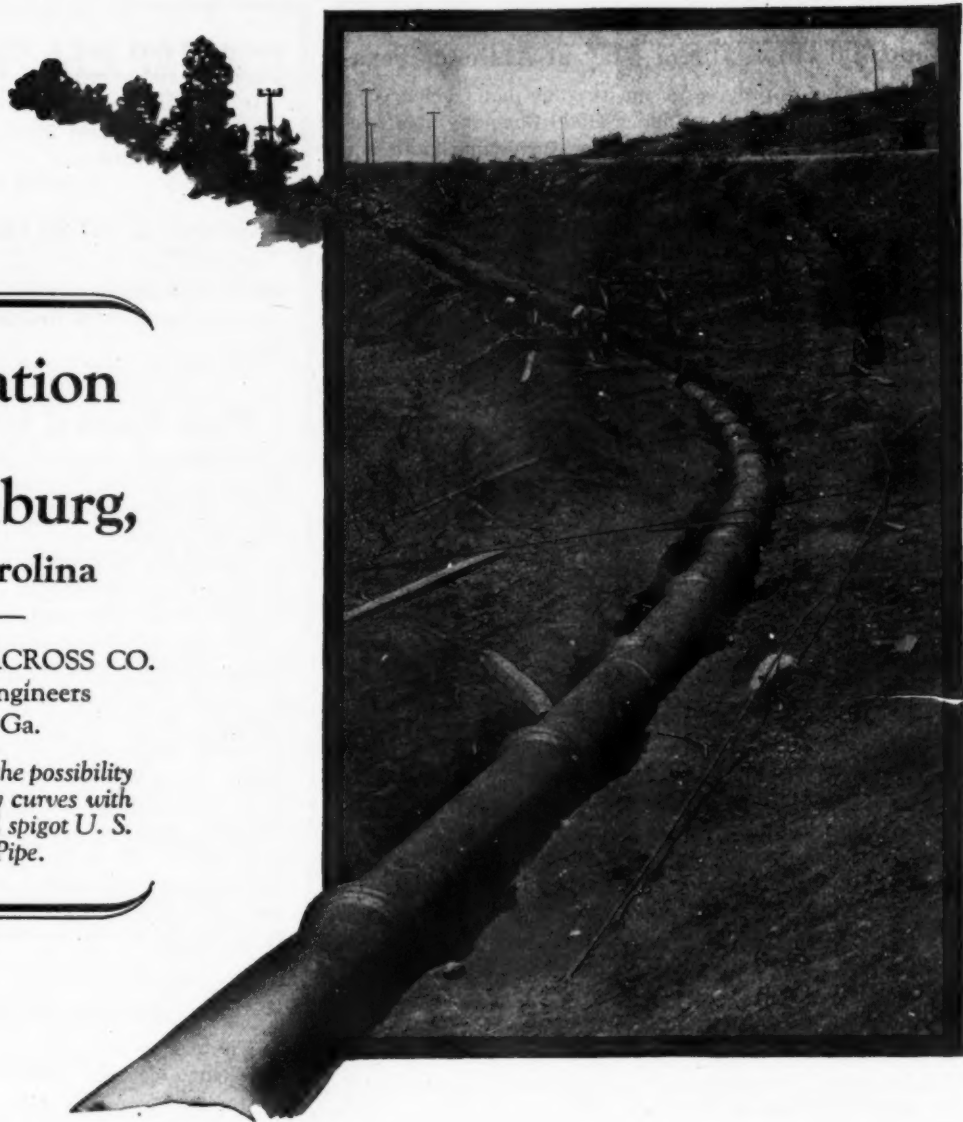
Again With Koehring Company.

The Koehring Company of Milwaukee, Wis., manufacturer of pavers, mixers, gasoline shovels, cranes and draglines, has appointed K. H. Talbot as director of sales in charge of domestic and foreign business. From 1919 to 1924 he was with the company as manager of field service. He resigned the position of manager of cement sales of the Cowham Engineering Company of Chicago to accept this latest appointment.

Installation
at
Spartanburg,
South Carolina

SOLOMON-NORCROSS CO.
Consulting Engineers
Atlanta, Ga.

*Illustration shows the possibility
of laying long easy curves with
full length bell and spigot U. S.
Cast Iron Pipe.*



This installation showed less
than 12% of the allowable leakage

LEAKAGE TEST ON CAST IRON SUPPLY MAIN							
Date of test	Dia. of pipe	Length tested miles	Duration of test hours	Initial pressure lbs. per sq. in.	Final pressure lbs. per sq. in.	Gals. water necessary to restore initial pressure	Leakage per inch dia. per mi. per 24 hrs.
5-7-26	24	2.77	2.0	70	70	50	9.0
5-6-26	27.56	7.57	2.0	40	40	200	11.52
Final tests, constant pressure maintained							



Write for details of the service we maintain for the assistance of Construction Engineers

United States Cast Iron Pipe

SALES OFFICES

Philadelphia: 1421 Chestnut St.
Chicago: 122 So. Michigan Blvd.
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Cleveland: 1150 East 26th Street
Minneapolis: 6th St. & Hennepin Ave.

New York: 71 Broadway
San Francisco: 3rd & Market Sts.
Pittsburgh: 6th & Smithfield Sts.
Dallas: Akard & Commerce Sts.
Kansas City: 13th & Locust Sts.

and Foundry Company

General Offices:

Burlington, New Jersey

\$500,000 Hotel Under Way at Abilene, Texas.

Construction is progressing on the new hotel being erected at Abilene, Texas, by the Abilene Hotel Company at a cost of approximately \$500,000, exclusive of furnishings and equipment. The building is nine stories and basement, 100 by 140 feet, of reinforced concrete construction, with a base course of granite, and terra cotta above to the third-floor line. From this line the building will be faced with brick to a terra-cotta



ABILENE'S NEW HOTEL NOW BUILDING.

cornice and parapet. The rear will be of face brick, while bulkheads under show windows will be of marble and terra cotta. Partitions will be of Gyp tile, with hollow clay tile around elevators and stairs, and floors will be of cement for the most part, with carpet strips. All bathrooms will have tile floors and suspended ceilings, while the vestibules will also be of tile.

A basement extending under the sidewalk to the curb on 4th street will contain a laundry, boiler room, storage rooms, help's locker rooms and public toilets. The first story will contain seven stores, coffee shop, main lobby, kitchen and other facilities, while a banquet hall, ladies' and men's lounges will be located on the mezzanine floor. On the floors above there will be 222 guest rooms. Two pressed steel stairways will extend from the basement to the ninth floor; there will also be one freight and two passenger elevators. The David S. Castle Company of Abilene is the architect and Robert E. McKee of El Paso general contractor.

Sub-contracts have been awarded as follows: Common brick, Abilene Pressed Brick Company; hydraulic cement, West Texas Builders Supply Company; crushed rock, Bontke Brothers; hauling, J. D. Moore; lumber, Jennings Lumber Company, all of Abilene; hollow clay tile, El Paso Brick Company; Portland cement, S. W. Portland Cement Company, El Paso; gypsum blocks and plaster, Certainteed Products Corporation, Houston; concrete, brick and plastering sand, T. C. Moore, Chillicothe, Texas; granite, Cold Spring Granite Company, Cold Spring, Minn.; terra cotta, Kansas City (Mo.) Terra Cotta and Faience Company; iron work and elevator doors, Southern Ornamental Iron Works; hollow metal windows and kalamein doors, L. S. Pinkston, Jr.; plate glass, copper setting and mirrors, Federal Glass and Paint Company; reinforcing steel, Mosher Steel and Iron Works; terrazzo and tile work, W. A. Jacobie Company, all of Dallas; marble work, Arnast Marble Company, Carthage, Mo.; millwork, Austin (Texas) Sash and Door Company; placing reinforcing steel, Hankins Brothers, Fort Worth; metal lath and pans, Dallas office of Truscon Steel Company, Youngstown, Ohio. The Sun Electric Company of Abilene has contract for

electrical work and S. P. Osburn, Fort Worth, for heating, plumbing and ventilation.

It is announced that the hotel, which is expected to be completed by August 15, has been leased to the Hilton Hotel Company of Dallas.

Agreement on \$6,166,000 Army Housing Bill.

Washington, D. C.—An agreement has been reached by House and Senate conferees on the Army housing bill, which carries a total of \$6,166,000 in appropriations and authorizations.

House Organ of Southern Baking Company.

Valuable as it is to the officers and employees of the Southern Baking Company, Southern Punch, the house organ of that concern, is of almost equal interest to the man on the sidelines and undoubtedly it would be read with enjoyment by the patrons of the company were they supplied with it each month. As it is, the miniature magazine is kept within the Southern Baking Company "family."

Opening with a short note of appreciation by President Harry D. Tipton to the employees for their "unstinted support," the December number carries an article on "Savannah, Georgia's Front Door to the Sea," in a series of descriptions of cities where Southern Baking plants are situated. "The South As a Market for Bakery Products" is another little story of real interest, followed by an article disclosing the fact that Southern Baking Company fruit cake is far from unknown in China, in Italy, Germany, Korea and other far countries. Local bakery news from the plants of the company are informative and the personal items tell all that is going on in the Southern circle.

Growth of New Orleans.

The research department of the New Orleans Association of Commerce has recently compiled statistics showing the varied growth of that city. The New Orleans Times-Picayune remarked recently after going over this survey that "The comparative statistics compiled measure the advance of the city in the 16 years along lines that bear directly on the community's growth and well-being." The report shows, for example, that bank deposits totaled \$85,627,000 in 1910 and in 1926 stood at \$245,156,000. Bank resources were \$131,771,000 in 1910 and were \$323,623,000 in 1926. The total for homestead resources was \$11,819,000 in 1910 and \$103,591,000 was reached last year. New Orleans' postal receipts increased from \$1,024,000 in 1910 to \$2,846,000 in 1926. Statistics were first kept on bank debits in 1921 and figures for that year stood at \$2,991,000; in 1926 they rose to \$4,130,000.

In other fields corresponding growth has been noted. The number of telephones in local use grew from 16,752 in 1910 to 65,423 in 1926. Gas meters increased from 24,860 in 1910 to 67,420 last year. Water meters increased more than three times during the 16-year period, growing from 22,592 to 76,898. Hard-surfaced streets increased from 114 miles in 1910 to 239 miles in 1926. The motor registration in 1915, the first year required, was 3452 and grew in 1926 to 62,900. A fivefold increase is noted in the value of school properties, which grew from \$2,668,000 in 1910 to over \$14,000,000 in 1926.

Mourning cards have been sent out by the traffic department of the Seaboard Air Line Railway Company, Norfolk, Va., announcing the death of J. G. Cantrell, general Western agent of the system at Daytona Beach, Fla., February 19. Mr. Cantrell was a native of Nashville, Tenn., and was connected with the Seaboard's traffic department for nearly 30 years.

THE BANK OF ALABAMA

ENSLEY, ALABAMA

R. A. TERRELL President
J. W. MINOR Vice-President
FOSTER HAMILTON Cashier

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Transacts a General Trust and Banking Business

Correspondence and interviews invited

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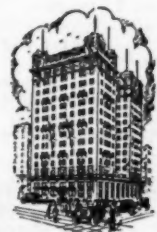
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CANADA

Baltimore's Newest and Finest Hotel

Located in the heart of the wholesale and retail sections.
Well lighted Sample Rooms. Attractive Cafeteria at
Popular Prices. Beautifully decorated
private dining rooms. Large Ball-room
or Convention Hall, seating 500 people.
Open Air Roof Garden (Open Season).



Every Room with private bath or shower
Rooms at \$4.00 per Day and Up

The SOUTHERN HOTEL

Fireproof Modern Convenient

LIGHT AND REDWOOD STS.

BALTIMORE, MD.

As YOUR Needs In Dixie Dictate

The loyal financial support
of sound enterprises in the
Southeast is the traditional
aim of this bank. To the
accomplishment of this aim
we bring diversified experi-
ence and resources of more
than fifty million dollars.

FIRST AND MERCHANTS National Bank of Richmond

John M. Miller, Jr., President

Capital, Surplus and Un-
divided Profits \$6,300,000

HELPLEFULNESS

is the motto of this Bank.

Let us tell you about it.

We invite your inspection of our modern,
burglar-proof and fireproof Safety Deposit
Vaults, which may be rented at small cost.

BALTIMORE COMMERCIAL BANK

GWYNN CROWTHER, President

26 South Street, Baltimore, Md.

Capital and Surplus \$1,350,000.00 Member Federal Reserve System

"The Early 1880's in Baltimore"

Southern men and women who lived in, or
visited Baltimore in the period when this Com-
pany was established—which was the year of
1884—will be interested, we believe, in our an-
niversary book "The Early Eighties: Sidelights
on the Baltimore of forty years ago." A copy
will be sent upon request.

MERCANTILE TRUST & DEPOSIT CO. OF BALTIMORE

Resources \$21,000,000 A. H. S. POST, Pres. F. G. BOYCE, Jr., Vice-Pres.

FINANCIAL NEWS

Bond Issues Proposed

Ala., Birmingham—School—City Comm. may call election April 12 on \$3,500,000 bonds.

Ala., Decatur—School Buildings—City votes March 23 on \$50,000 bonds. Address City Clerk.

Ala., Huntsville—School—City, E. R. Matthews, Clk., voted \$75,000 bonds; receives bids March 24 for \$75,000, 5% bonds.*

Ark., Clarendon Park—City votes March 25 on \$10,000 bonds. Address City Clerk.

Ark., Texarkana—City Hall, etc.—City voted \$317,000 bonds. Address City Clk.*

Fla., Dunnellon—Sidewalk—Town, T. K. North, Clk., receives bids Mar. 10 for \$13,000 6% \$1000 denom. bonds.

Fla., Fort Myers—Paving—City Comm. plans \$2,000,000 bond issue.

Fla., Fort Myers—Road—Lee County Commrs. call election March 15 on \$56,000 bonds.

Fla., Leesburg—School—Lake County School Board, Tavares, calls election March 29 on \$300,000 bonds.

Fla., Mayo—Road, Bridge—Lafayette County Commrs., Cullen W. Edwards, Clk., receives bids Mar. 7 for \$250,000 5% \$1000 denom. bonds.

Fla., Miami—Dade County Commrs., Geo. F. Holly, Clk., receives bids Mar. 7 for \$500,000 5% \$1000 denom. bonds; \$150,000 general highway; \$125,000 Key Largo road; \$225,000 causeway highway.

Fla., Ormond—Sidewalks—Town plans selling \$150,000 bonds within 30 days. Address Town Clk.

Fla., St. Augustine—St. Johns County Commrs., Obe P. Goode, Clk., receives bids Mar. 15 for \$400,000 5% coupon bonds.

Fla., St. Petersburg—School—St. Petersburg Dist. votes Mar. 8 on \$450,000 bonds. Address Pres. Board of Trustees.

Fla., Stuart—Road—Martin County voted \$1,772,000 bonds. Address County Commrs.*

Fla., Vero Beach—Paving—City, H. G. Redstone, Clk., plans bond issue; Carter & Damerow, Inc., Engrs.

Ga., Cordele—Hydro-Electric Development—Crisp County Commrs. plan calling election about middle of April on \$1,250,000 bonds.

Ga., Ludowici—Bridge—Long County plans bond election on County's share of cost of building Altamaha River Bridge at Doctortown. Address County Commrs.

Ga., Tybee—Electric Light & Power Distribution System—Town, Thomas Gamble, Mayor, votes first week in Apr. on bonds.*

La., Bastrop—Park—Town, A. G. McBride, Mayor, receives bids Mar. 22 for \$50,000, 5½% \$1000 denom. bonds; Mabel McGreight, Clk.

La., Bonita—School—Morehouse Parish School Board, Bastrop, calls election April 4 on \$35,000 Dist. No. 10, Tenth Ward, bonds.

La., Many—Water Works—City voted \$50,000 bonds. Address City Clk.*

La., Natchitoches—Road—Natchitoches Parish Police Jury receives bids March 7 for \$25,000 bonds.

La., New Iberia—Public Improvement—Iberia Parish Police Jury, Marcus DeBlanc, Sec., receives bids Mar. 14 for \$68,500 6% \$500 denom. bonds.

Md., Western Port—Town plans \$200,000 bond issue, to retire old bonds and improve water works. Address The Mayor.

Miss., Corinth—School—School Board, W. Thomas Young, Sec., plans calling election on \$200,000 bonds.

Miss., Decatur—Road—Newton County Board of Supvrs. may call \$225,000 bond election.

Miss., Yazoo City—Road—Yazoo County Board of Supvrs. plans selling \$17,500 bonds.

Mo., Cartersville—School Equipment—School Board, T. E. Jeffries, Pres., considering \$10,000 bond election; H. N. McCall, Supt. of Schools.*

Mo., Kennett—School—Kennett School Dist. voted \$12,000 bonds. Address Pres. Board of Public Instruction.*

Mo., Sedalia—School—Board of Education calls election Mar. 22 on \$400,000 bonds.

Mo., Versailles—Water Works—City votes Apr. 15 on bond issue. Address City Clk.

N. C., Beaufort—Shipping Pier—Carteret

County may issue \$100,000 bonds. Address County Commrs.

N. C., Mooresville—School—City voted \$50,000 bonds. Address Pres. Board of Education.

N. C., Reidsville—Water, Sewer, Municipal Building—City, Lola R. Young, Clk., receives bids March 8 for \$100,000 6% \$1000 denom. bonds.

Okla., Clinton—School—Clinton School Dist. voted \$20,000 bonds. Address Sec. Board of Education.

Okla., Medford—School—City Board plans calling election on \$20,000 bonds.

Okla., Okmulgee—School—City voted \$250,000 bonds. Address Pres. School Board.

S. C., Greenville—Tubercular Hospital—Greenville County may issue \$150,000 bonds. Address County Commrs.

S. C., Taylors—School—Greenville County Board of Education, Robert L. Meares, County Supt. and Chmn. of Board, Greenville, plans calling election on \$35,000 bonds.

Tenn., Alton Park, Branch Chattanooga—Municipal Improvement—Town, S. O. Kinsey, Mayor, calls election Apr. 20 on \$225,000 bonds for street paving and completing sanitary and storm sewers.

Tenn., Covington—Courthouse—Tipton County plans bonds election. Address Judge of Probate.

Tex., Beaumont—Wharf Improvement—City Wharf and Dock Comm., T. V. Smelker, Chmn., contemplates \$250,000 bond issue.

Tex., Brownsville—Drainage—Cameron County Water Improvement Dist. No. 5, C. L. Hunter, rejected \$600,000 6% bonds. Lately noted bids Feb. 19.

Tex., Colorado—School—Spade Common School Dist., Mitchell County, voted \$15,000 bonds. Address Pres. Board of Trustees.

Tex., Cotulla—Road—LaSalle County Commissioners call election in March on \$600,000 bonds; Van B. Harris, County Engr.

Tex., Eagle Pass—Irrigation—Maverick County may call \$3,000,000 bond election in Oct. or Nov.; W. L. Rockwell, Engr.

Tex., Eagle Lake—Refunding—City voted \$81,272 5½% bonds; R. T. Westmoreland, Mayor.*

Tex., Edinburg—Road—Hidalgo County, A. W. Cameron, County Judge, plans \$6,000,000 bond election.

Tex., Fort Stockton—Road—Pecos County Commrs. plan calling \$500,000 bond election; John Stovall, County Engr.

Tex., Goliad—Road—Goliad County Commrs. may call election in Mar. on \$1,250,000 bonds.

Tex., Houston—Road—Harris County Commrs. Court, H. L. Washburn, County Auditor, receives bids March 21 for \$1,500,000 of \$6,000,000 bonds.

Tex., Levelland—Courthouse, Jail—Hockley County Commrs. Court, may call election Apr. 5 on \$150,000 bonds.

Tex., Matador—Road—Motley County Commrs. Court, J. Floyd Jordan, County Judge, voted \$250,000 5½% bonds; receives bids Mar. 14 for \$250,000 bonds.*

Tex., Orange—Drainage—Orange County Commrs. Court may call election on about \$660,297 bonds; Dewitt C. Bennett, County Judge.

Tex., Pampa—Highway—Gray County, T. M. Wolfe, County Judge, calls election Mar. 30 on \$1,200,000 bonds. Lately noted election Feb. 1.

Tex., Perryton—School—Perryton Independent School Dist. voted \$75,000 bonds. Address Board of Education.

Tex., Valley Mills—Sewer—City, A. S. Tweedy, Mayor, may call \$40,000 bond election; Koch & Fowler, Engrs., 310 Fidelity Union Bldg., Dallas.

Tex., Wichita Falls—Road—Wichita County, E. W. Nicholson, County Judge, plans bond election.

W. Va., Mannington—Water Works—City plans \$102,000 bond election. Address City Clk.

Bond Issues Sold

Ark., Little Rock—Street—Bankers Trust Co., Little Rock, purchased 5½% bonds at 100.33.

Ark., Marianna—Road—W. B. Worthen & Co., Little Rock, purchased \$16,000 Aubrey Dist. and \$10,000 Rondo Dist. bonds.

Fla., Inverness—Road—Citrus County

Commrs. sold \$750,000 bonds to W. A. Harri-man & Co., New York, and I. B. Tigrett & Co., Memphis, Tenn.

Fla., Jacksonville—Drainage, Sewerage—City Comm., M. W. Bishop, Sec., sold \$760,000 5% bonds to Florida National Bank, Jacksonville, at \$781,172 and accrued interest.

Fla., Key West—Road, Bridge—Monroe County Commrs., D. Z. Filer, Clk., sold \$340,000 bonds to R. M. Grant & Co., Inc., New York, at 95.*

Fla., Miami—Road, Bridge—Dade County Commrs., Geo. F. Holly, Clk., sold \$1,600,000, 5% bonds, jointly, to Stranahan, Harris & Oatis, Inc., Toledo, and Eldredge & Co., New York, at 97.33.*

Fla., Sarasota—Street—City sold \$22,000 bonds to Stranahan, Harris & Oatis, Inc., Toledo, Ohio, at 95 cents on dollar.

La., Slidell—Municipal Improvement—Mayor and Board of Aldermen sold to C. P. Ellis & Co., New Orleans, La., \$105,000 Sewerage Dist. No. 1, bonds at premium of \$1147; \$70,000 water works bonds at premium of \$402.*

N. C., Durham—Municipal Improvement—City sold \$1,900,000 4½ per cent. bonds to First National Bank, Durham, and First National Bank, New York, at \$1,915,371.*

S. C., Charleston—Paving—City sold \$49,000 5% Series "L" bonds to Peoples Securities Co., Charleston, at 101.

Tenn., Gleason—Water Works—Town, W. W. Bandy, Mayor, sold \$30,000 6% bonds to Little, Wooten & Co., Jackson, Tenn., at \$1250 above par and accrued interest.*

Tex., Brownsville—Improvement—City Comm. sold \$500,000 5% bonds to A. C. Allyn & Co., Chicago, Ill., at par, accrued interest and premium of \$1927.

Tex., Panhandle—Refunding—Carson County, Larry O. Cox, County Engr. sold \$10,000 road and bridge and \$25,000 general fund 6% warrants to First State Bank, Panhandle, at par and accrued interest.*

Tex., Vernon—Road—Wilbarger County, J. V. Townsend, County Judge, sold \$850,000 4½% bonds to Taylor-White Co., Oklahoma City, at par, accrued interest and premium of \$9351.*

Tex., Waco—Road—McLennan County Commrs. sold \$10,000 Road Dist. No. 1 bonds to City of Waco, E. E. McAdams, City Mgr.

Tex., Wharton—Road—Wharton County Commrs., Gerard Peters, Clk., El Campo, sold \$100,000 bonds to Mercantile Trust Co., St. Louis, at par, accrued interest and premium of \$6080.*

Building and Loan Associations

Ky., Louisville—Greater Louisville Savings & Building Assn., 419 N. Market St., plans increasing capital, \$9,500,000 to \$10,000,000.

Tenn., Paris—Paris Building & Loan Assn., Washington St., authorized capital \$100,000, organized; F. M. VanCleave, Pres.*

New Financial Corporations

D. C., Washington—General Securities Investment Co., incorporated; Leon Robbin, 3163 18th St. N. W.

Fla., Miami—Atlantic Finance Corp., capital \$10,000, chartered; C. E. Hightower, Carson Bradford.

Fla., Palatka—East Florida Bank & Trust Co., Lemon and Third St., consolidated with Palatka Bank & Trust Co., as East Florida Bank & Trust Co., capital \$100,000; reopened; T. E. Mobley.

Fla., Palmetto—Palmetto State Bank, plans re-organizing and increasing capital; D. M. Courtney, head of reorganizing committee.

Fla., St. Petersburg—New England-Florida Mortgage Co., capital \$100,000, incorporated; Harvey S. Chase, A. T. Blocker.

Fla., Venice—Venice and Nokomis Bank, Venice Ave. and Nassau St., capital \$50,000, organized; Dr. Fred H. Albee, Pres.

Miss., Coldwater—Citizens Bank, capital \$25,000, organized; W. P. Veasey, Coldwater.

Mo., Kansas City—Fidelity National Co., capital \$200,000, incorporated; Henry C. Flower, 3823 Locust St.

N. C., Durham—Home Mortgage Co., capital \$500,000, incorporated; W. S. Lockhart, Forest Hill.

Tenn., Atwood—Rubin McNatt, interested in organizing bank with \$10,000 capital.

(Continued on page 150)

In writing to parties mentioned in this department it will be of advantage to all concerned if the Manufacturers Record is mentioned.

NEW YORK LIFE INSURANCE COMPANY

DARWIN P. KINGSLEY - - - President
A Mutual Organization—Founded in 1845 Incorporated under the Laws of New York
346 BROADWAY, NEW YORK, N. Y.

Eighty-second Annual Statement

To the Policy-holders:

You, the members of the New York Life Insurance Company, owned 2,220,784 policies at the close of business on December 31, 1926.

You are a vast community of people representing every honest walk in life—farmers, bankers, tradesmen, merchants, laborers, manufacturers, employers and employees, and professional men and women—young and old—all banded together in a common enterprise for the common good.

If you and your families could be brought together, you would populate one of the largest cities in the world. What a city it would be, with every family striving to safeguard its own future through a single co-operative institution for insurance and savings!

A Prosperous Year

In 1926, this Company, which you own, wrote another chapter of progress:

New insurance over **900 Million Dollars.**

Total insurance in force over **5 $\frac{3}{4}$ Billion Dollars.**

Paid to members and beneficiaries over **133 Million Dollars,**
including over **53 Millions in Dividends.**

You, the policy-holders, have accumulated assets of more than **1 $\frac{1}{4}$ Billion Dollars.** This money plus your future deposits and compound interest will eventually provide for payment of the Company's obligations to you and your beneficiaries.

We believe we are one of the companies Hon. Charles Evans Hughes had in mind when he recently said:

"I like to think of the spirit of life insurance, for it is the spirit of achievement."

Nylic Is Your Investing Agent

The fund of more than **1 $\frac{1}{4}$ Billion Dollars** is invested in accordance with the strict requirements of the laws of the State of New York; and it plays a substantial part in the development of the nation's farms, homes, railroads and public works.

As policy-holders, you practise thrift. You invest soundly and safely. Your money will be available to you and your dependents, impressed with emergency-power, at a time when it will be needed most.

That is what Mr. Hughes meant when he said, in the address to which I have just referred, that a life insurance policy was the best guardian of the purse that had ever been discovered.

Small Average Policy

Your total insurance is impressive; but if you divide it by 2,220,784, the number of policies, you will find that the size of the average policy is only **\$2,590.**

Of course, some members have more than one policy; and many of you are also insured in other companies. But the great majority are UNDERINSURED, as you will see.

Cash Value of Life

Fire insurance and life insurance protect values.

The value of a worker's life is the cash worth of his future net earnings, usually far greater than the value of his property. The following points may help you to estimate the monetary value of your life.

The United States Government fixed \$10,000 as the insurable life-value of American soldiers and sailors in the Great War, *mostly young unmarried men who had been earning small incomes or none at all.*

Recently, according to the *New York Times*, the American Statistical Association declared that the money value of the average American life (including children and adults who earn no income) is **\$17,500!** *As an income-earner, the value of your life is much greater.*

Consider the capital required to produce income from interest. At 5%, it takes \$24,000 to yield \$1,200 a year—\$100 a month.

How Much Insurance Is Needed?

The answers to the following questions will enable you to measure your insurance needs: What is the minimum income you will require in your old age, or if you become totally and permanently disabled; and what is the smallest annual income your family could manage on if you were taken away?

Is it \$500 a year, or \$1,000, \$2,000, \$5,000, \$10,000, or more?

How much will it require to settle your estate—to pay your debts, mortgages, and taxes, including the federal and state inheritance taxes?

How much cash will be needed at your death, or the death of your partner or an official of your company, to stabilize credit or to enable surviving partners or stockholders to acquire the deceased associate's interest in the business and carry on?

Your Program

You probably have a program, because you are insured; but how does your program stand to-day? How far short is it of the safety mark or the mark you are aiming at? May I suggest that you figure it out for yourself, or call in one of our Agents to help you work out a plan suited to your needs, so that you may feel secure as to your own and your family's future.

DARWIN P. KINGSLEY, President

Financial Summary, January 1, 1927

ASSETS		LIABILITIES	
Real Estate; First Mortgage Loans on Farms, Homes and Business Properties.....	\$440,388,584.62	Insurance and Annuity Reserves.....	\$1,003,297,782.00
Bonds U. S., other Gov'ts, States, Cities, Counties, Public Utilities, R. R.'s, etc.....	583,984,590.22	Dividends payable to Policy-holders in 1927.....	54,535,527.00
Policy Loans, Cash and other Assets.....	242,692,691.20	All other Liabilities.....	102,448,175.76
Total.....	\$1,267,065,866.04	General Contingency Funds.....	106,784,381.28
Total Income in 1926.....		Total.....	\$1,267,065,866.04
			\$295,341,937.98

FINANCIAL NEWS

(Continued from page 148)

Tenn., Johnson City—American Bank & Trust Co., 121 Fountain Sq., opened; Carmon S. Bowers, Pres.

Tenn., Big Sandy—First National Bank of Big Sandy, capital \$25,000, organized; A. S. Justice, Correspondent; succeeds Bank of Big Sandy.

Tex., Dallas—Wray-Ingram Investment Co., capital \$50,000, incorporated; W. H. Wray, F. B. Ingram.

Erlanger Deposit Bank, W. S. Price, Pres., Erlanger, Ky., and Citizens Bank, E. H. Blankenbaker, Pres., merged, with \$100,000 capital; Chester T. Davis, Pres., formerly Cashier of Citizens Bank.

Stockholders will take action Mar. 23 on consolidation of Central National Bank with Fourth and First National Bank, and consolidation of Fourth and First Bank and Trust Co. with Nashville Trust Co., all Nashville, Tenn., with complete union of all four institutions.

Trade Literature

Walworth Log Gives Good Advice.

The Walworth Log for February, published by the Walworth Co. of Boston, Mass., contains a number of excellent articles, including one entitled "A Balanced Steel Nipples Stock," which is intended to indicate what stock of nipples a jobber should carry to best meet demand and still not overstock his bins with slow-moving or non-moving items. While the balanced stock is an approximation, it is arrived at through study of actual sales, and hence may be of great value to a jobber in determining what stock he should carry regularly. A couple of stock lists, one for black and the other for galvanized nipples, accompany the article.

Louisville, Kentucky; Its Advantages.

A finely illustrated book of 16 pages with the title "Louisville: Premier Industrial Location of America," has been issued by the Louisville Industrial Foundation, 401 West Main street, Louisville, Kentucky. Its purpose is to tell the reader about Louisville, its location, its resources and also its advantages. The Foundation which published it was organized for the purpose of aiding in the establishment of new industries in the city, and it is stated that the close co-operation of the officers and the directors is extended in every way in the formulation of manufacturing plans. Under its charter the Foundation is empowered to make loans to meritorious manufacturing concerns.

Bulletin On Quarter-Turn Drives.

The Leather Belting Exchange, 119 South Fourth street, Philadelphia, Pa., Louis W. Arny, secretary, has issued Research Bulletin R-16, containing "A Report of Experiments on Horizontal Quarter-Turn Drives," by R. F. Jones, research engineer. It is illustrated, the pictures supplementing the text in a very satisfactory and enlightening manner. It is noted that every important transmission system has somewhere a quarter-turn drive which sometimes may have caused trouble. But it can be operated successfully when properly installed, and Mr. Jones' article explains the scientific principles involved and provides an intelligent basis for calculation of capacity. Copies of the bulletin can be obtained free on request addressed to the Exchange.

Austin-Western Catalog—1927.

The Austin-Western Road Machinery Company of Chicago has issued its new 1927 general catalog, which is now being distributed. During the last year a large number of improvements and additions have been made to the company's lines which will be of particular interest to engineers and contractors engaged in highway work. The style of the book is different from its predecessors; it contains a large number of operating pictures and the essential features of the equipment are presented simply without burdening the reader with many details. Special catalogs on all of the Austin and Western machines contain detailed descriptions and complete specifications. The company will send a copy of the new catalog to anyone who requests it.

Sheet Steel in Buildings.

"Making Markets," for February 1927, a monthly periodical issued by the Sheet Steel Trade Extension Committee, Oliver Building, Pittsburgh, Pa., contains several articles of timely interest. One of these is by Robert T. Bowman, president of the R. T. Bowman Co., manufacturers of the Bowman portable steel buildings. Another is by Walter C. Carroll, vice-president of the Inland Steel Co. A third contribution tells about the Cherokee Service Station built of sheet steel at North Chattanooga, Tenn., a picture of which is included. Many other articles contain other testimony of the advantages of the use of sheet steel in construction.

Plimpton Lift-Truck Folder.

A well-illustrated folder has been issued describing the Plimpton 4-point suspension lift truck for which C. A. Graham, 170 Broadway, New York city, is the national distributor. It is stated: "The many advantages rising from the fact that the Plimpton is built like an automobile, rather than the conventional lift-truck design, are pictured in the sketches," which appear in the folder. It is said to be distinguished in that it has the steering knuckle design. Complete description, with tabulated data, make the circular complete. The names of many prominent users of these trucks are also given.

Three Jaeger Machine Books.

The Jaeger Machine Company, Columbus, Ohio, has lately issued several publications, viz., Bulletin P 26, Catalog No. 27 and Catalog No. T-27. The first of these relates to the company's plaster mixer of the self-cleaning hoe model, the second concerns the Jaeger non-tilt mixer 10-S, and the third covers the company's line of tilter mixers, concrete, plaster, mortar, pavers and placing plants. All of these issues are finely and liberally illustrated and there is also fully adequate data to enable customers to make accurate selections of the machines best suited to their work.

Kansas City Industrial Folder.

The Central Industrial District Association of Kansas City has published a new folder which gives some very interesting information about Kansas City, and especially about the central industrial district. It is for free distribution, and anyone who desires a copy may obtain it by addressing a request to the association at 1427 West 9th street, Kansas City, Mo. C. C. Daniel is president and J. R. Bremner business manager. A fine panoramic view is a striking feature of the folder, and there is also a map of the part of the city showing location of freight terminals, etc.

Western Wheeled Scraper Jubilee Book.

The Western Wheeled Scraper Company of Aurora, Ill., manufacturers of dump cars and earth and stone handling machinery, has issued a large and finely illustrated "Jubilee Catalogue," entitled "Fifty Years of Service," in honor of its 50th anniversary, which it is now celebrating. There are 168 pages in the book, and several of them at the beginning are devoted to the history of the company; the rest of them show different machines made by the company as they look when turned out, or else as they appear when engaged in work on road construction, iron mining, ditching, quarrying, railroad building, etc. It is a very impressive publication. The cover lettering is gold-embossed and the entire design is most artistic. The book is dedicated to the founders and builders of the company—Capt. W. Beckwith, Capt. C. H. Smith and Dr. A. W. McClure. The company was founded in 1877.

New Monorail Catalogue.

The new Loudon Overhead Monorail catalogue No. 8 is probably the most complete catalogue ever offered in its line. There are 56 pages of engineering details, data, etc., so complete that anyone may work out an entire system for any given conditions. There are also many views selected from the thousands of successful installations made by the Loudon Machinery Company of Fairfield, Iowa, all over this country and abroad. These views show the Loudon Monorail and hand-power cranes, but supplements are planned to be added to the catalogue showing views and details of chain-drive systems and other special developments in the company's line. A feature of the catalogue is the section showing blueprints of plans of typical installations for various industries such as foundries, automotive manufacturing, refractories, glass, chemical, baking and other plants.

Seeger Ice Machine Cabinets.

The Seeger Refrigerator Company, St. Paul, Minn., has issued a portfolio of pictures done in white on dark background illustrating its latest cabinets made expressly for machine installation. Any ice machine can be installed in these refrigerators; they do not have any drain pipes. The doors, it is stated, are double gasketed to prevent condensation on the outside, and the insulation is three inches of sheet cork in the bottom and two inches on the side walls, the top, the back and the doors, all of the cork being heavily hydro-lened. The outside is of heavy Armeo iron, into which vitreous porcelain has been fused at a high temperature, and it will not chip. The lining is of the same material. Shelves are woven wire, dipped into liquid tin. The company has a branch in Atlanta, Ga., with S. G. Gray as district manager.

General American Tank Storage Plant.

"Bulk Liquid Storage" is the title of a booklet issued by the General American Tank Storage and Terminal Company Inc., New Orleans, La., which is subsidiary to the General American Tank Car Corporation of Chicago. It gives complete information concerning the facilities offered at the port of New Orleans, these including facilities for loading and unloading of tank steamers and tank cars, the storage of any kind of liquid commodity and also the barreling or the bulking of any liquid. A large picture gives a general view of the company's extensive plant upon the Mississippi River. Hugo Epstein is vice-president and general manager at New Orleans.

Analysis of Membership Relations in Co-operative Associations.

A detailed analysis of membership relations and field-service problems of co-operative associations has been undertaken by the recently created Division of Co-operative Marketing in the United States Department of Agriculture. The first of the series of such studies—that of some cotton and tobacco associations—has been completed and a printed report, Department Circular No. 407-C, issued by the department. This report is an analysis of the motives and expectations of members at the time of joining, reasons for dissatisfaction, the degree of appreciation of the services performed by the associations, together with the economic doctrines held by the members. Two tobacco and two cotton associations were included in the study and the data obtained from interviewing more than four hundred members of these associations are used as a basis for the report.

Outstanding features of the attitudes and opinions of the members interviewed, as listed by the Department of Agriculture, are as follows:

Low prices prevailing at the time of organization and the hope of improvement through market control and elimination of middlemen were the causes of many farmers joining the association. Many farmers believe that the reason higher prices have not prevailed or earlier settlements have not been made in tobacco is because of insufficient control occasioned by lack of volume.

Members of the associations believe the non-member has been benefited by the work of the association as much or more than the members.

More than half the members interviewed in the four associations believe that price fixing on the basis of cost of production could be achieved if the associations had sufficiently

large membership, and about the same number believe that farmers should organize and set prices on their products. In only one association did as many as half of the members believe that price fixing through organization was impracticable.

Delayed payments are the most common cause of dissatisfaction. Holding the commodity in expectation of better prices or to maintain a definite price level ranked second as a cause of dissatisfaction.

Members gave little evidence of understanding and appreciation of marketing services performed by the associations or of knowledge of unit costs or salaries of officials. Few have definite ideas regarding what may reasonably be expected of a co-operative marketing association.

The field service division of the associations is regarded as a means of policing the membership and securing deliveries rather than an educational and informational agency. The members need more information regarding their associations and a better understanding of the economics of marketing before they can fully co-operate with their organization.

Bid for New York-Atlanta Air Mail.

The Pitcairn Aviation Company of Philadelphia submitted the only bid opened by the Postoffice Department last week for the New York-Atlanta overnight mail service. It proposes to carry the mails for \$3 per pound, including equipment.

The town of Spindale, N. C., will soon receive bids for the construction of a 1,000,000-gallon filter plant, for which the Carolina Engineering Company of Charlotte is preparing plans and specifications.

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Municipalities and Contractors

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THE PROVIDENT SAVINGS BANK & TRUST CO.
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NEW YORK

Four-Mile Bridge and Tunnel Project for Tampa —Proposals Already Invited.

Tampa, Fla.—Plans have been formulated by the Tampa Subway Corporation, N. W. Green, secretary, for the construction of a four-mile reinforced concrete toll bridge across Hillsboro Bay and a 2500-foot reinforced concrete tunnel under the ship channel of the same waters. The bridge structure will contain a 110-foot double-leaf bascule draw, while the entire work will involve 1,500,000 cubic yards of dredging and hydraulic fill, 180,000 cubic yards of concrete, 6800 tons of reinforcing steel and 100,000 lineal feet of pine piling.

Proposals have been invited by the corporation from contractors who are in a position to aid in financing the enterprise.

A Lesson to Southern Cities.

Of real interest, and of no little value, to the enterprising and growing cities of the South is a new book, "Broadway, the Grand Canyon of American Business," published by the Broadway Association of New York City, and dedicated to "The progress and prosperity of Greater New York on the occasion of its three hundredth anniversary, 1626 to 1926." The introduction is by John E. Gratke, managing director of the Association.

In a magazine story, some time ago, one of the characters spoke of "little old New York," to which another character replied: "New York isn't little and it isn't old—it is rebuilt every 10 years." Lee J. Eastman, president of the Broadway Association, expresses the same thought in these words:

"There is an old familiar saying among the people of New York that if you wish to keep track of the changes in the skyline of Manhattan you should make a sightseeing tour of the city every six weeks, otherwise you will not be able to recognize the old home town."

There is a world of thought for Southern cities in this statement. With the example of the American metropolis before them they should, and can, so build with an eye to a distant future as to preclude the prodigious waste incurred by the practical rebuilding of a city "every 10 years." Even allowing for its handicap on an island site, the Manhattan section of New York has been built up in inexpressibly wasteful fashion. He who writes this article was born and brought up in New York city and has seen the changes in more decades than he cares to count. Buildings go up and come down in such rapid succession that one hardly can keep track of them—truly. "New York is rebuilt every 10 years," and one "should make a sightseeing tour of the city every six weeks to be able to recognize the old home town."

Incidentally, Mr. Eastman's reference to the "old home town" may be taken as a pleasantry—for there is no safer wager than that eight of every ten men one may meet on the street in New York are not New Yorkers and have not lived in the city 20 years. Yet, with the remarkable migration toward the South, now under way, such a condition is not impossible in the near future for more than one Southern city.

"Broadway continues officially as a street for 150 miles until it reaches Albany, the capital of the State; it is policed, lighted and paved nearly all the way," says Mr. Eastman. And in time the same may well be written about the principal street of more than one city in the South.

The book, "Broadway, the Grand Canyon of American Business," is an anniversary publication of which the Broadway Association well may be proud. It should be read in the South. The time, indeed, may come when Peachtree street in Atlanta, or Bay street in Jacksonville, or Canal street in New Orleans, or Main street in Memphis, or some street in some other Southern city, will take that proud title from Father Knickerbocker's great White Way.

Additional Floors for Atlanta Building.

The Georgia Railway and Power Company, Atlanta, advises the MANUFACTURERS RECORD that it has authorized the construction of three additional floors on the Marietta street section of the Electric and Gas Building in Atlanta. The building is in two sections, one fronting on Marietta and the other on Walton street, separated by an alleyway. Upon completion of the additional floors the Marietta street section will be six stories and the Walton street section five stories. New space provided will be occupied by departments now located in a nearby office building.

South Carolina Asks Road and Bridge Bids.

Columbia, S. C.—Bids will be received until March 10 by the State Highway Department for four road and six bridge projects, the former covering a total of approximately 15 miles. Proposed road work will consist of 3.01 miles of concrete highway in Aiken county, 7.7 miles in Marion county, .71 mile of clearing and grubbing in Spartanburg county and 3.62 miles of sand-clay road in Calhoun county. Proposed bridges will span the Lower Santee River between Charleston and Georgetown counties, Southern Railroad in Edgefield county, structures across Salkehatchie River between Colleton and Hampton counties and in Whippy Swamp, and three bridges in Oconee and Pickens counties.

Plans and specifications are on file at the office of the State Highway Engineer, Columbia.

Beating Guinea Pigs.

George Moody of Flagler Beach, Fla., is planning to build up a colony of poultry and dairy farmers in that section, and judging by the success of poultry raising in that State, there is a large opportunity for such work.

W. L. Thurston of Ormond Beach, who is representing the MANUFACTURERS RECORD in Florida as general subscription agent, in writing about Mr. Moody's plan, adds:

"Do you know about Mrs. La Pont of Longwood? She told me that two years ago last June she started with twelve baby ducks of the Florida black Muscovy kind; that she has since purchased a few South American black Muscovy drakes, but has raised all the rest herself. She says that last year she sold 4000 baby ducks and between 1800 and 2000 drakes for table use. It seems to me that ducks must beat guinea pigs."

Texas College Textile Training.

"Textiles and the New Generation" is the caption of a booklet lately published by the Texas Technological College, Lubbock, Texas. It tells of how the college is training young people for the cotton-milling industry. The introduction says: "This little story is directed to the eyes of youth as they search for the path to opportunities in the textile industry. It is likewise intended for the eyes of maturity as they look about for a means of helping the new generation to find its place in the scheme of life." The booklet is fully illustrated and one of the pictures shows growing cotton in a section of West Texas where ten years ago it was said that cotton could not be grown. Other halftones show college students at work with textile machinery, thus obtaining practical experience in cotton-mill operations. Dr. Paul W. Horn is president of the college and his picture is included. The booklet was printed by the Texas Farm and Ranch Publishing Company, under the supervision of Wellington Brink.

President Coolidge has signed an Army housing bill authorizing the expenditure of \$4,776,000, among the larger items of which are \$1,086,000 for Fort Jay, Governor's Island, N. Y.; \$1,300,000 for March Field, Cal., and \$521,000 for Brooks Field, Texas.

Country's Largest Rice Mill in Operation at Lake Charles, La.

The new plant of the Lake Charles Rice Milling Company at Lake Charles, La., the largest of its kind in the country, represents the last word in rice-mill construction; it was especially designed and constructed with a view to the economical handling of grain. It has a milling capacity of 6000 barrels in 24 hours and the yields have been highly satisfactory, according to the builders.

The rice mill is a building 50 by 80 feet, five stories high, with a monitor on top. There is a bulk storage elevator, with a capacity of 10,000 barrels, and a warehouse, 100 by 400 feet, two stories high, providing storage for clean and rough rice to a total of 150,000 barrels. The building is of heavy-type wooden-mill construction, covered with Johns-Manville corrugated concrete-asbestos siding and Johns-Manville built-up composition roof. There is a brick boiler and engine room with corrugated concrete-asbestos siding and roof.

Rice can be taken either in sack or bulk and delivered by conveyors to storage bins, from which it is fed to the mill.

The plant is situated on deep water in the heart of what is said to be the biggest rice-distribution territory in America. Rough and clean rice can be shipped in or out by rail or water.

The entire plant is protected by automatic sprinkler system, with three sources of supply—the city water-works, private elevated tank and a large automatic fire pump connected with the Calcasieu River.

The entire job was handled by the Southern Construction and Mill Supply Company, Lake Charles, with Don Lyttleton, engineer in charge. P. Olivier & Sons, Lake Charles, had the building contract. I. C. Carter, architect, Lake Charles, collaborated with Mr. Lyttleton in designing the structures.

Among the firms who furnished major items of equipment and materials are the following:

Huntley Manufacturing Company, Brocton, N. Y., grain cleaners, paddy machines, etc.; Sprout, Waldron & Co., Muncy, Pa., brushes, reels and trumbles, as well as all transmission and elevators; Engelberg Huller Company, Syracuse, N. Y., rice hullers; Huckauf & Bulle, Hamburg, Germany, shelling stone; Robert Boby, London, England, indented grading cylinders; Richmond Manufacturing Company, Lockport, N. Y., aspirators and bran dusters; Hoepner Automatic Scale Company, Chicago, Ill., automatic scales, sewing machines and package machinery; Willey-Ellis Company, Chicago, Ill., bran and grain driers; the Hardie-Tynes Manufacturing Com-

pany, Birmingham, Ala., 1000-horsepower, cross-compound Corliss engine; Elliott Company, Wellsville, N. Y., 150-kilowatt turbo-generator unit; Union Iron Works, Erie, Pa., boilers; the Grinnell Company, Providence, R. I., sprinklers; Krause-Managan Lumber Company, Lake Charles, building materials.

Large Display Advertises Arkansas Products.

A permanent display of Arkansas products is now being sponsored by the Chamber of Commerce of Hot Springs. It is the purpose of this exhibit to show visitors who come to that health resort why Arkansas is called the "Wonder State of the Southwest," as the organization expresses it.

Displays from 60 counties show the various resources of the State, a partial list of products including: Zinc, sandstone, gypsum, silver, rutile, fluorspar, antimony, iron, slate, copper, manganese, lead, tripoli, cement, chalk, soapstone, diamonds, pearls, garnets, crystals, clays, kaolin, Fuller's earth, novaculite, limestone, coal, cotton, corn, oats, rice, grapes, apples, peaches, cantaloupes, strawberries and potatoes.

There are exhibits of Arkansas smokeless coal, Niloak pottery and various products of Arkansas short-leaf pine. There is also a miniature of the Remmel Dam and the Arkansas Power and Light Company system, and a rice display from Prairie le Grande. Fort Smith is preparing a display of 83 manufactured products and space has been reserved for exhibits by the Southeast Arkansas Development Association, the Crowley's Ridge Development Association and the Arkansas Bee Keepers Association. The State Department of Mines, Manufactures and Agriculture is assisting the Hot Springs Chamber of Commerce in carrying on this program. It has been suggested that the exhibit should include a booth with samples of mineral waters of the State, and another showing the new paper manufacturing which is to be carried on at Camden.

Railway Conductors to Build Home at Savannah.

James Stewart & Co., Inc., of New York wire the MANUFACTURERS RECORD that they have closed contract for the erection of a home for the aged and infirm at Savannah, Ga., for the Order of Railway Conductors, with headquarters at Cedar Rapids, Iowa. It is stated that the building will be two stories, fireproof, of reinforced concrete and brick, construction to begin by March 1 and to be completed within five months. The contract price is said to be \$242,000. The Otis Elevator Company, New York, received contract for elevators.



THE NEW RICE MILL AT LAKE CHARLES.



BOND ISSUES

PROPOSALS

BUILDINGS

PAVING

GOOD ROADS



Bids close April 1, 1927.

Treasury Department, Bureau of Engraving and Printing, Washington, D. C., February 24, 1927. Sealed proposals are invited to furnish paper box blanks, paper and check paper during the fiscal year beginning July 1, 1927. The right is reserved to reject any or all bids or parts of bids. Samples must be received at the Bureau of Engraving and Printing not later than 2 P. M. Friday, April 1, 1927. Blank forms with specifications for proposals, giving dates on which the bids for the several schedules will be opened, and further information will be furnished on application to A. W. Hall, Director.

Bids close April 5, 1927.

TREASURY DEPARTMENT, Office of the Supervising Architect, Washington, D. C., February 26, 1927. SEALED BIDS will be opened in this office at 3 P. M., April 5, 1927, for the construction of buildings, also for mechanical equipment and outside services for buildings at the Federal Industrial Institution for Women at Alderson, West Virginia. Drawings and specifications for construction, also drawings and specifications for mechanical equipment and outside services, or for both, may be obtained at this office in the discretion of the Supervising Architect. Requests from intending bidders for drawings and specifications should state whether those for construction or for mechanical equipment are desired. Proposals will be considered only from individuals, firms or corporations possessing satisfactory financial and technical ability, equipment and organization to insure speedy completion of the contract, and who have established a record for expedition on contracts of similar character and magnitude. The fact that any concern obtains a set of plans and specifications from any source whatever and submits a bid shall not constitute a waiver of the foregoing stipulations. Jas. A. Wetmore, Acting Supervising Architect.

Bids close March 8, 1927.

\$360,000 6% Highway Bonds

Bushnell, Fla.

Sealed bids will be received by the Board of County Commissioners, in care of the undersigned, in Bushnell, Florida, until Noon, March 8, 1927, for \$360,000 Highway Bonds, maturing as follows: \$18,000, 1933 to 1952, inclusive.

All bonds dated January 1, 1927: denomination, \$1000; bearing interest at the rate of 6%, principal and semi-annual interest (J and J1) payable in New York City in gold.

The bonds are general obligations of the County, payable from an unlimited tax. Authorized by a vote of the electors on January 18, 1927.

All bids must be enclosed in a sealed envelope marked "Proposal for bonds," and be accompanied by a bond in the penal sum of \$15,000, running to the Board of County Commissioners and satisfactory to them, with sureties that the bidder will comply with the terms of his bid, or else be accompanied by a certified check for \$7200, drawn upon a Bank or Trust Company doing business in Florida, or upon a National Bank anywhere. Any bidder whose bid shall be accepted shall, with his sureties, if bond be given, be liable to the County for all damages on account of the nonperformance of the terms of his bid. Bonds will be delivered at place of purchaser's choice on or about the 20th day of April, 1927. The right to reject any or all bids is reserved. The bonds will not be sold at less than 95.

W. N. POTTER,

Clerk of Board of County Commissioners.
Sumter County, Florida.

RATE: 35 cents per line per insertion.

PUBLICATION DAY: Thursday.

FORMS CLOSE: 4 P. M. Monday.

DAY LETTER: When too late to send copy by mail to reach us by 4 P. M. Monday, forward by day letter.

THE DAILY BULLETIN OF THE MANUFACTURERS RECORD: Published every business day; gives information about the industrial commercial and financial activities of the South and Southwest.

The Daily Bulletin can be used to advantage when copy cannot reach us in time for publication in the Manufacturers Record before bids are to be opened, or when daily publications are necessary to meet legal requirements.

The same rate applies—35 cents per line per insertion.

Bids close April 1, 1927.

Treasury Department, Bureau of Engraving and Printing, Washington, D. C., February 15, 1927. Sealed proposals are invited to furnish dextrine, oils, textiles and dry colors during the fiscal year beginning July 1, 1927. The right is reserved to reject any or all bids or parts of bids. Samples must be received at the Bureau of Engraving and Printing not later than 2 P. M. Friday, April 1, 1927. Blank forms, with specifications for proposals, giving dates on which the bids for the several schedules will be opened, and further information will be furnished on application to A. W. Hall, Director.

Bids close March 23, 1927.

\$241,000 5% Road Bonds

Tallahassee, Fla., February 15, 1927.

Sealed bids will be received by the State Road Department of the State of Florida, F. A. Hathaway, Chairman, in Tallahassee, Florida, until 10 o'clock A. M. March 23, 1927, for \$241,000 Madison County (Florida) Road Bonds, maturing January 1, 1952. All bonds dated January 1, 1922; denomination \$1000, bearing interest at the rate of 5%, from and after January 1, 1927, principal and semi-annual interest payable at any bank in the City of Madison, Florida, or at National City Bank of New York, New York, at the option of holder.

Full faith and credit and resources of Madison County, Florida, pledged for payment of principal and interest as same become due. Bonds authorized by vote of the electors of said county, and validated by decree of the Circuit Court of the Third Judicial Circuit of Florida in and for Madison County, by decree rendered on the 18th day of February, 1922. Purchaser will be furnished with approving opinion of John C. Thomson of New York down to point of delivery by county to department.

All bids must be enclosed in a sealed envelope marked "Proposal for Bonds" and be accompanied by a bond in the penal sum of Five Thousand Dollars, running to the State Road Department of Florida and satisfactory to said department, with sureties, that the bidder will comply with the terms of his bids, or else be accompanied by a certified check for \$4820, drawn upon a bank or trust company doing business in Florida or upon a national bank anywhere. Any bidder whose bid shall be accepted shall, with his sureties, if bond be given, be liable to the department for all damages on account of the non-performance of the terms of his bid. Bonds will be delivered to purchaser at Tallahassee on payment of amount bid. The right to reject all or any bids is reserved.

STATE ROAD DEPARTMENT OF
FLORIDA.

F. A. HATHAWAY, Chairman.

J. L. CRESAP,
State Highway Engineer.

Bids close March 8, 1927.

TREASURY DEPARTMENT, Office of the Supervising Architect, Washington, D. C., Feb. 8, 1927. SEALED BIDS will be opened in this office at 3 P. M. March 8, 1927, for repairs to Roofing and New Wood Promenade Deck, etc., East Wing Main Building, at the U. S. Marine Hospital, Norfolk, Va. Drawings and Specifications may be obtained from the Medical Officer in Charge of the Marine Hospital, Norfolk, Va., or at this office, in the discretion of the Supervising Architect. Jas. A. Wetmore, Acting Supervising Architect.

Toll Bridge

Tampa, Fla.

The Tampa Subway Corporation is beginning the construction of a toll bridge and vehicular tunnel at Tampa, Florida.

The program covers approximately one and one-half million cubic yards of dredging and hydraulic fill; four miles of reinforced concrete highway bridge; one double leaf bascule bridge of one hundred and ten foot span and twenty-five hundred lineal feet of reinforced concrete vehicular tunnel under the ship channel in Hillsboro Bay.

Approximately one hundred eighty-nine thousand cubic yards of concrete, sixty-eight hundred tons of reinforcing and one hundred thousand lineal feet of pine piling will be required to complete the project.

Proposals are invited from contractors equipped to undertake work of this kind, and who are in position to assist in the financing.

For full particulars communicate with,

N. W. GREEN, Secretary
Tampa Subway Corp.,
723 Stovall Professional Bldg.,
Tampa, Fla.

Bids close March 8, 1927.

Oiling Highway

DEPARTMENT OF PUBLIC WORKS

STATE OF MARYLAND

STATE ROADS COMMISSION.

NOTICE TO CONTRACTORS.

Baltimore, Md.

SEALED PROPOSALS for oiling 7 sections of State Highway, as follows:

No.	Counties	Miles	Gallons
1.	Dorchester, Somerset, Wicomico and Worcester	70.97	134,973
2.	Queen Anne, Kent and Cecil	30.07	61,007
3.	Prince George, Howard and Montgomery	43.07	85,548
3-A.	Anne Arundel, Calvert, Charles, Prince George and St. Mary's	52.53	193,086
4-7.	Baltimore and Harford	67.73	149,985
5.	Carroll, Frederick, Howard and Montgomery	94.56	182,563
6.	Allegany, Garrett, Frederick and Washington	115.75	252,136
Total		474.68	1,050,298

Will be received by the State Roads Commission at its offices, 601 Garrett Building, Baltimore, Maryland, until 12 M. on the 8th day of March, 1927, at which time and place they will be publicly opened and read.

Bids must be made upon the blank proposal form, which, with specifications and plans, will be furnished by the Commission upon application.

No bids will be received unless accompanied by a certified check for the sum of Five Hundred (\$500) Dollars, payable to the State Roads Commission. (Only one certified check is necessary for each bidder.)

The successful bidder will be required to give bond and comply with the Acts of the General Assembly of Maryland respecting contracts.

The Commission reserves the right to reject any and all bids.

By order of the State Roads Commission this 18th day of February, 1927.

JOHN N. MACKALL, Chairman.

L. H. STEUART, Secretary.

Bids close March 19, 1927.

Wabasso Bridge

Wabasso, Fla.

Sealed bids will be received by the Commissioners of the Wabasso Bridge District at the office of the American Fruit Growers, Inc., at Wabasso, Florida, until 10 A. M. March 19, 1927, for the construction of a bridge across the Indian River. Separate bids will be received as follows:

SECTION I—"Wooden Bridge." This will consist of approximately 4530 lineal feet of wooden bridge on creosoted pine pile bents, including a 30-foot fixed wooden truss.

SECTION II—"Draw Span." This will consist of a 16-foot roadway, standard steel turn draw on a concrete center pier. Overall length of draw approximately 150 feet.

The District reserves the right to award contract to separate bidders on separate section of the work, or to reject any or all bids and to waive defects.

All bids must be on the blank forms provided in the Proposal, Specifications and Contract.

Each bid must be accompanied by a certified check for \$4000, and the contractor must provide a construction bond for 50% of his bid.

Plans, Specifications and forms of contract and bond may be examined at the office of Carter & Damerow, Inc., Engineers for the District, at Vero Beach, Florida, or sets may be obtained from them by making a deposit of Twenty-five Dollars (\$25). Fifteen Dollars (\$15) of which will be refunded on their return within fifteen days following the opening of bids.

GEORGE SEARS, Secretary.

Bids close March 15, 1927.

Street Improvements

Lake City, Fla., Feb. 15, 1927.

Sealed proposals will be received by the City Commission of Lake City, Florida, at the city offices in said city until 2 o'clock P. M. on Tuesday, the 15th day of March, 1927, and then will be publicly opened and read, for constructing certain street improvements, consisting of approximately the following quantities: 26,222 square yards Kentucky Rock Asphalt surfacing; 5429 lineal feet concrete curb and extended gutter, 2 1/2 feet over all; 15,960 lineal feet concrete curb and extended gutter, 4 1/4 feet over all; 1652 lineal feet concrete curb and other work incidental thereto.

Plans, specifications and proposal forms may be inspected in the office of the City Clerk and Auditor or may be obtained from C. E. Swank, City Manager-Engineer, Lake City, Florida, upon deposit of ten (\$10) dollars, which amount will be refunded if both plans and specifications are returned in good condition within ten days from the date of letting.

Proposals shall be submitted upon blank forms provided for the purpose and shall be accompanied by a certified check in an amount equal to at least five (5%) per cent of the amount bid, made payable to the City of Lake City, Florida. Should the bidder to whom the contract is awarded fail to enter into contract and furnish acceptable surety bond within ten (10) days from date of notice that he has been awarded the contract, the proceeds of his certified check shall become the unconditional property of the City of Lake City, Florida, for the use and benefit of said city as liquidated damages.

Proposals that contain any erasures, alterations or additions in writing of any condition, limitation or provision may be rejected as informal. All proposals shall be filled in, in accordance with the form provided.

The right is reserved by the city to reject any or all bids and to waive any informalities in the letting of the contract, and the contract may be awarded as a whole or in part to one or more bidders, as considered to the best interest of the city. The bidder must be prepared, if so requested, to present evidence of experience, ability and financial standing as well as a statement of equipment available for this improvement.

The proposal and certified check shall be enclosed in a sealed envelope and plainly marked. Payments for the work will be made in cash upon monthly estimates furnished by the Engineer.

CITY OF LAKE CITY, FLORIDA,
R. C. MANSFIELD,
Auditor and Clerk.

C. E. SWANK,
City Manager-Engineer.

Bids close March 8, 1927.

Bascule Piers

DEPARTMENT OF PUBLIC WORKS
STATE OF MARYLAND
STATE ROADS COMMISSION
NOTICE TO CONTRACTORS

Baltimore, Md.

SEALED PROPOSALS for building two bascule piers, as follows:

Contract W-37—Two (2) Bascule Piers, comprising the substructure for a bascule bridge over the Wicomico River at Main street, Salisbury, in Wicomico County.

will be received by the State Roads Commission at its offices, 601 Garrett Building, Baltimore, Maryland, until 12 M. on the 8th day of March, 1927, at which time and place they will be publicly opened and read.

Bids must be made upon the blank proposal form which, with specifications and plans, will be furnished by the Commission upon application and cash payment of \$1, as hereafter no charges will be permitted.

No bids will be received unless accompanied by a certified check for the sum of Five Hundred (\$500) Dollars, payable to the State Roads Commission.

The successful bidder will be required to give bond and comply with the Acts of the General Assembly of Maryland respecting contracts.

The Commission reserves the right to reject any and all bids.

BY ORDER of the State Roads Commission this 24th day of March, 1927.

JOHN N. MACKALL, Chairman.
L. H. STEUART, Secretary.

Bids close March 10, 1927.

Street and Highway Improvements

De Land, Fla.

Sealed proposals will be received by the Board of County Commissioners of Volusia County, Florida, at the office of the Clerk of the Circuit Court of Volusia County, De Land, Florida, until 10 o'clock A. M. on the 10th day of March, 1927, for the furnishing of materials and construction of the widening of Orange street from Canal street to Louisa street and Magnolia street from Canal street to South City Limits in the City of New Smyrna, Fla., and for the resurfacing of the New Smyrna-De Land-Osteen Highway, located in the Turnbull Special Road and Bridge District of the County of Volusia, and consisting of the following items, to wit:

PROJECT No. 1.

800 Lin. Ft. 12-inch Storm Drains, 0-4 ft. Cut.
500 Lin. Ft. 12-inch Storm Drains, 4-6 ft. Cut.
70 Lin. Ft. 12-inch Storm Drains, 6-8 ft. Cut.
5 Manholes, 0-4 ft. Vert. Hgt.
2 Manholes, 4-6 ft. Vert. Hgt.
20 Storm Inlets.
120 Cu. Ft. Brick Masonry.
50 Storm Inlets to be adjusted.
6,000 Cubic Yards Excavation.
28,000 Lin. Ft. Concrete Curb and Gutter.
22,000 Sq. Yds. of Brick, Concrete or Bituminous Pavements.

PROJECT No. 2.

145,464 Sq. Yds. Asphalt Surface Treatment, Slag Cover.

Bids will be received on the whole or any project of the work.

Plans and specifications may be examined at the office of the Engineer in New Smyrna, Fla. Copies of the specifications and plans may be obtained at the above place upon receipt of ten dollars, which will be returned on a bona fide bid.

Each bidder must accompany bid with a certified check for an amount of not less than five per cent of the amount bid, drawn to the order of W. P. Wilkinson, Chairman of the Board of County Commissioners of Volusia County.

The right is reserved to reject any or all bids in whole or in part, or to accept such bids as are to the best interest of the county.

W. P. WILKINSON,
Chairman of Board of
County Commissioners.
SAM'L D. JORDAN,
Clerk of Court.

N. A. HOTARD, Engineer.

Bids close March 21, 1927.

Highway Construction

Pascagoula, Miss.

Notice is hereby given that sealed proposals will be received by the Road Protection Commission of Jackson County, Mississippi, until 10 o'clock A. M., MONDAY, MARCH 21, 1927, for the furnishing of plans, specifications and estimates of cost of construction of two or more miles of paved highway, paved sidewalk and seawall or device complete, for protection of such road or highway along shore of said county, being exposed to danger from storms.

Engineers are requested to file detailed plans and specifications, together with estimates of cost of such highway, sidewalk and seawall or device for protection of same, as they deem best adapted to location proposed and most economical in construction.

The Road Protection Commission will give full consideration to all proposals submitted, reserving the right to reject any or all bids, to waive any informalities in the bids received, and to accept any bid which is deemed most favorable to the interests of said county.

If proposal be accepted contract will be awarded in the manner provided by law.

By order of the Road Protection Commission of Jackson County, Mississippi, this the 18th day of February, 1927.

F. H. LEWIS, President.

Bids close March 28, 1927.

Water-Works System

Bunnell, Fla.

Sealed proposals will be received by the Mayor and Commissioners of the Town of Bunnell, Florida, until 2 o'clock P. M. on the 28th day of March, 1927, for the furnishing of material and construction of a water-works system in and for the Town of Bunnell, Florida, in accordance with plans and specifications on file at the office of the Town Clerk of Bunnell, Fla., or at the office of the Engineer at New Smyrna, Fla., consisting of the following items, to wit:

4,000 lineal feet of 10-inch Cast-Iron Pipe, Class "B."
3,160 lineal feet of 8-inch Cast-Iron Pipe, Class "B."
22,700 lineal feet of 6-inch Cast-Iron Pipe, Class "B."
4,180 lineal feet of 4-inch Cast-Iron Pipe, Class "B."
12,250 lineal feet of 2-inch Galvanized Steel Pipe.
16 tons of Special Castings.
19 2-inch x 2-inch Steel Crosses.
210 3/4-inch x 2-inch Steel Crosses.
6 10-inch Gate Valves and Boxes.
9 8-inch Gate Valves and Boxes.
54 6-inch Gate Valves and Boxes.
12 4-inch Gate Valves and Boxes.
32 2-inch Gate Valves and Boxes.
46 6-inch 3-way Steamer Fire Hydrants.
7 4-inch 3-way Steamer Fire Hydrants.
2,000 lineal feet of 6-inch pipe to be salvaged and relaid.
15 cubic yards Class "A" Concrete.
25 cubic yards Class "B" Concrete.
1 75,000-gallon tank on 105-ft. tower.
1 Pump House.
2 700-gallon per minute direct-connected centrifugal pumping units.
1 400-gallon per minute direct-connected centrifugal pumping unit.
1 250-gallon per minute motor-driven suction force pump.
1 50-ft. concrete reservoir.

Bids will be received on the whole or any section of the work.

Plans and specifications may be examined at the office of the Town Clerk in the Town of Bunnell, Fla., or at the office of the Engineer at New Smyrna, Fla. Copies of the specifications may be obtained from the above places upon receipt of Five Dollars, which will be returned on a bona fide bid. Copies of the plans may be obtained on the payment of \$15.

Each bidder must accompany bid with a certified check for an amount not less than five per cent of the amount bid, drawn to the order of John P. Gerz, Town Clerk, Town of Bunnell, Fla.

The right is reserved to reject any or all bids in whole or in part.

ZEB E. BOOE,
Mayor of Town of Bunnell.
JOHN P. GERZ, Clerk.
N. A. HOTARD, Engineer.

Bids close March 14, 1927.

Sewer Construction

Fort Thomas, Ky.

Sealed bids will be received by the City Engineer, Fort Thomas, Kentucky, until 12 o'clock noon on Monday, March 14, 1927, for furnishing materials and building complete approximately fifty thousand (50,000) feet of 8 and 10 ft. sewer, together with appurtenances. Each bid must be accompanied by a certified check on a clearing house bank to the sum of \$2000. Plans and specifications may be obtained at the office of the City Engineer, City Building, Fort Thomas, Kentucky. A charge of \$5.00 will be made for plans and specifications, returnable in part. The City reserves the right to reject any or all bids.

ROLAND B. PYNE,
City Engineer.

Bids close March 17, 1927.

Water-Main Extension

Vero Beach, Fla.

Sealed proposals will be received by the City Council of the City of Vero Beach, Florida, at the City Hall until 8.00 P.M. March 17, 1927, at which time they will be publicly opened and read, for the purchase and installation of:

7,600 feet of 6-in. C. I. main.
20,000 feet of 8-in. C. I. main.

20 hydrants.
24 valves and boxes.

Each bid must be accompanied by a certified check for 5 per cent. of the amount of the bid, and the Contractor must provide a construction bond for 100 per cent. of his bid.

Plans, specifications, and forms of contract and bond may be examined at the office of CARTER & DAMEROW, INC., Engineers for the City of Vero Beach, Florida, or sets may be obtained from them by making a deposit of fifteen dollars, ten dollars of which will be refunded upon the return of the plans in good condition.

B. T. REDSTONE, Mayor,
H. G. REDSTONE, Clerk.

Bids close March 9, 1927.

Sewage-Disposal Plant

Charlotte, N. C.

Sealed proposals will be received by the Board of Commissioners of the City of Charlotte, North Carolina, until 11 o'clock A. M. in the Council Chamber of the City Hall on the 9th day of (Wednesday) March, 1927, for the construction of a Sewage Disposal Plant on Irwin Creek.

The work will embrace the construction of Aeration and Settling Tanks, together with the necessary Screen Units and Distribution Works, the construction of a Compressor House and the furnishing and installing of Motor-Driven Compressor Units and the construction of Sludge Concentration Tanks and a Press House, together with the furnishing and installation of complete Sludge Pressing and Conveying equipment. Approximately 130 tons cast-iron pipe and 160 tons reinforcing steel will be required for the above work.

Plans and specifications are on file with the City Clerk at Charlotte, N. C., and with the Engineer at Durham, N. C., and blank forms of Proposal, Specifications, etc., may be obtained from the Engineer without charge.

Those desiring a full set of plans can obtain them from the City Clerk upon the payment of \$15, which will be returned to those only who submit bona fide bids on the work. Single prints may be obtained at \$1 each.

Consideration will be given only to bids of contractors who submit evidence showing that they are licensed under "An Act to Regulate the Practice of General Contracting," ratified by the General Assembly of North Carolina on March 10, 1925.

Certified check for five (5) per cent of the amount bid for such items for which a proposal is made must accompany all proposals.

Bids will be opened in the presence of those interested, but the Board reserves the right to reject any or all bids.

By order of the Board of Commissioners this the 10th day of February, 1927.

EDGAR READ, City Clerk.

Engineer:
WILLIAM M. PIATT,
Durham, N. C.

Bids close March 24, 1927.

Drainage Improvements

Norfolk, Va.

Sealed proposals for construction of drainage improvements in Sunray Drainage District No. 2, Norfolk County, Virginia, will be received by the County Board of Drainage Commissioners of Norfolk County until 12 o'clock Noon, March 24, 1927, at the office of the Board, 622 Law Building, Norfolk, Virginia.

The work to be done consists of approximately the following:

1. Digging 10½ miles of drainage canals, involving the excavation of 145,020 cubic yards, and the clearing of 1 mile of right-of-way 80 feet wide through wooded land.
2. Construction of 14 concrete culverts at road intersections.

Separate proposals will be received for each of the above items.

Plans, specifications and profiles of canals may be inspected at the office of the said Board, or for the sum of \$10.00 the above data will be furnished prospective bidders.

The work is to be completed within 18 months from the time the contract is awarded.

A certified check in the amount of 5% of the bid, made payable to the County Board of Drainage Commissioners of Norfolk County, must accompany each bid.

The successful bidder will be required to execute the contract and to furnish a bond subject to the approval of the Board in an amount equal to 25% of the contract price, conditioned upon the faithful performance of the contract.

The right is reserved to reject any or all bids.

JOHN G. WALLAEETT,

Chairman.

A. O. LYNCH,
Secretary.

Bids close March 15, 1927.

Waterworks Improvements

Franklin, Ky.

Sealed bids for improvements to the Waterworks at Franklin, Kentucky, will be received by the Board of Mayor and City Council at the office of the Mayor, until 1 P. M. March 15, 1927, at which time and place they will be publicly opened and read. The work will be awarded in four contracts, as follows:

1. Furnishing three motor-driven, one-million gallon centrifugal pumps and one three-million gallon centrifugal pump.
2. Furnishing and installing equipment for two rapid-sand gravity type filter units, each of 500,000 gallon daily capacity.
3. Concrete work for complete filtration plant, 1,500,000 gallon daily capacity, installation of pumps (except wash-water pump), water mains and miscellaneous items.
4. Furnishing and erecting elevated steel tank of 100,000 gallon capacity.

Plans and specifications may be examined at the office of the City Clerk at Franklin, or at the office of the Engineers; or a copy may be obtained from the Engineers upon receipt of a deposit of \$15, of which amount \$10 will be refunded when the plans and specifications are returned in good condition. For plans only, or specifications only, a deposit of \$7.50 is required. No deposit required for specifications for pumps only, or tank only. If further information is desired, address the Engineers.

The right is reserved to reject any or all bids and to waive informalities.

Each bid must be accompanied by a valid certified check or bidder's bond, made payable to the City Treasurer for a sum not less than 5% of the bid. Successful bidders will be required to furnish performance bond in the sum of 50% of the contract price. Contractors will be paid in cash monthly on the basis of 90% of the value of work done and materials furnished.

P. E. LEWIS, Mayor.

KLYCE & HARRUB, Engineers,
705 Fourth and First National Bank Bldg.,
Nashville, Tenn.

Bids close March 15, 1927.

Garbage and Refuse Destructor

Memphis, Tenn., Feb. 28, 1927.

Notice is hereby given that sealed proposals will be received at the office of C. C. Pashby, City Clerk, until 2.30 o'clock P. M. Tuesday, March 15th, 1927, for furnishing all labor, materials, hauling, tools for and constructing a Garbage and Refuse Destructor, under the following general conditions:

Revised bids are being asked for on an eighty (80) ton guaranteed ten hour basis Garbage and Refuse Destructor, including building to accommodate and stack of sufficient capacity and height. Bids to include ramps except earth fill, City of Memphis to do all general excavation, to firing floor elevation.

Building to be fireproof construction throughout, of concrete, brick or steel, or a combination of these.

The property to be furnished by the City of Memphis. Bids to be received on the completed job, including building and foundation.

Time of completion must be stated in proposal.

Bidder must make an investigation and study of City of Memphis' Method of Collection, materials collected and kind of equipment used in hauling.

The City of Memphis reserves the right to reject any and all bids.

A certified check for one thousand (\$1,000.00) dollars on some solvent bank, payable to the order of the City of Memphis, or a bidder's bond for a like amount, conditioned on the bidder's executing the contract, if awarded to him, shall accompany the proposal.

Said check, bond or order, as the case may be, will be returned to the unsuccessful bidder upon award of the contract, and to the successful bidder when he makes approved bond and signs contract for the faithful performance of the work.

Cash payment for this work will be made by the City of Memphis by order of the Board of Commissioners of the City of Memphis.

ROWLETT PAINE, Mayor.

Attest: C. C. Pashby, City Clerk.

Bids close March 9, 1927.

Waterproofing and Caulking High School and Shop Buildings

Baltimore, February 21, 1927.

PROPOSALS WILL be received by the Board of Awards of Baltimore City for Waterproofing All Exterior Brick and Cast Stone Surfaces above grade, caulking all exterior windows and doors and metal windows on the FOREST PARK SENIOR AND JUNIOR HIGH SCHOOL AND SHOP BUILDING, Baltimore, Maryland, for the Mayor and City Council.

BIDS must be executed in duplicate and inclosed in sealed envelopes, addressed to the Board of Awards of Baltimore City, and marked on the outside:

"PROPOSALS FOR WATERPROOFING AND CAULKING FOREST PARK HIGH SCHOOL AND SHOP BUILDING," and left with the City Register, Mr. Frederick A. Dolfield, at his office in the City Hall, on or before 11 A. M. Wednesday, March 9, 1927.

EACH BID must be accompanied by a certified check of the bidder on some clearing-house bank in the amount of One Thousand Dollars (\$1000), made payable to the Mayor and City Council of Baltimore.

The successful bidder will be required to give bond and comply with the City Charter respecting contracts.

The specifications for waterproofing and caulking may be seen at the office of the Supervising Engineer, 518 Hearst Tower Building, on and after Thursday, February 24, 1927, on deposit of certified check for \$20.

The Board reserves the right to reject any or all bids.

PUBLIC IMPROVEMENT COMMISSION,
H. G. FERRING,
Supervising Engineer.

Approved:
HOWARD W. JACKSON,
President, Board of Awards.

Approved:
JOSEPH PATTI, JR.,
Asst. City Solicitor.

Approved:
B. L. CROZIER,
Chief Engineer.

Bids close March 15, 1927.

Sewerage System

Eufaula, Ala.

Sealed proposals on blank forms furnished by the City and addressed to the "MAYOR AND COUNCIL, EUFAULA, ALABAMA," will be received until 2 P. M., March 15, 1927, at Eufaula, Ala., for furnishing all material, labor and equipment and doing the following Sanitary Sewerage work:

Approximately 5500 feet eight-inch T. C. Pipe, with cuts ranging from 6 to 14 feet, with all necessary manholes, flush tank devices, house connections and appurtenances thereto as specified.

Each bid must be accompanied by a certified check, made payable to the Mayor, for not less than \$2000.

Plans and specifications can be seen at the office of the City Clerk or the office of the engineers, and specifications can be obtained from the engineers upon payment of two dollars.

Full set of plans will be furnished by the engineers upon payment of ten dollars to cover cost of printing and handling.

The right is reserved to reject any or all bids.

H. H. CONNER, Mayor
RUBY D. McEACHERN, Clerk.
H. S. JAUDON ENGINEERING CO.,
ENGINEERS.
Elberton, Georgia.

Bids close March 23, 1927.

Hospital Building

Jackson, Miss.

The State Hospital Removal, Improvement and Land Sale Commission will receive bids for hospital building, two convalescent cottages, two attendants' homes, officials, building and dining hall up to 11 A. M. March 23, 1927, at Jackson, Mississippi, according to plans and specifications of N. W. Overstreet, Architect, Jackson, Mississippi.

Certified check or bidder's bond for 5 per cent of bid, or in a total sum of \$20,000, at option of the bidder, with proposal.

Commission reserves the right to reject any or all bids.

STATE HOSPITAL REMOVAL, IMPROVEMENT AND LAND SALE COMMISSION.

By R. L. BROWN, Secretary,
Box 40.

Bids close March 15, 1927.

Chestnut Poles Wanted

Richmond, Va.

Sealed proposals will be received in the office of the Director of Public Utilities, city of Richmond, Virginia, until 11 A. M. Tuesday, March 15, 1927, for a supply of CHESTNUT POLES.

Specifications and bid forms may be had upon request at Room 319, City Hall.
(Signed) GEO. H. WHITFIELD,
Director.

Bids close March 15, 1927.

Transit Shed Construction

Mobile, Ala.

Sealed proposals will be received by the Alabama State Docks Commission at their office, second floor State Office Building, Mobile, Alabama, until 10 A. M. March 15, 1927, and then publicly opened, for furnishing and constructing a concrete and steel transit shed about one hundred twenty (120') feet wide by thirteen hundred fifty (1350') feet long for Pier No. 1.

A deposit of Ten Thousand Dollars (\$10,000) in cash or certified check, or in lieu thereof a bidder's bond for like amount with an approved company, is required with each proposal.

Specifications, proposal forms and plans are on file in the office of the Purchasing Agent, second floor State Office Building, Mobile, Alabama. Complete sets will be furnished to prospective bidders on deposit of Fifteen (15) Dollars, which will be refunded to depositors who submit formal proposals or return sets in good condition within thirty days of opening of bids.

A bond to the amount of 50% of the sum bid is required with contract.

The right is reserved to reject any or all bids and to waive informalities.

ALABAMA STATE DOCKS COMMISSION.

WILLIAM L. SIBERT,
Chairman.



CLASSIFIED OPPORTUNITIES



MINERAL AND TIMBER LANDS, WATER POWER, MISCELLANEOUS PROPERTIES

GREAT MONEYMAKER in Alabama, 15,000 acres timbered farm and mineral lands. Only ten dollars per acre. Easily financed. H. H. Hansen, Macon, Mississippi.

30,000 ACRES Marion County, high, rolling lands, \$5 per acre cash. Other large tracts, \$10 to \$15 per acre. Also, mineral and timber lands, phosphate, lime, fuller's earth, road rock, clay deposits.

MELVIN RYDER, Ocala, Fla.

KAOLIN AND LIMESTONE LANDS FOR SALE.

About 3500 acres at Adams Park, Ga., on Southern Rwy., which passes through property 20 miles south of Macon. There are three deposits of raw material of commercial interest—Kaolin, Limestone and Fuller's Earth. Kaolin has an overburden of from 5 to 15 ft. of sand and has thickness of 15 to 45 ft. almost pure Kaolin, about 50 ft. from R. R. Across Savage Creek land is underlain by Ocala Limestone and Fuller's Earth. Limestone is well above water level and has thickness of 40 to 50 ft. For further particulars address

MRS. MINTER WIMBERLY,
Adams Park, Ga.

MARL

CEMENT DEALERS, TAKE NOTICE—We have for sale an especially high grade of Marl, estimated to be a million tons or more. Accessible to deep water and rail.

BOX 126, WEST POINT, VA.

TIMBER AND TIMBER LAND

FOR SALE—5000 acres fine hardwood timberland, price \$15.00 per acre; fee simple, on terms if desired.

Also 19,000 acres fine hardwood timber lands. Reasonable price and terms. One mile of railroad station.

Also 2000 acres fine hardwood timber lands in fee simple; price \$13.00 per acre. All three tracts virgin timber, Oak, Yellow Poplar, Chestnut, etc.

Write JOHN H. DAVIS & SON, Attys., Toccoa, Georgia.

RATES AND CONDITIONS

Rate 30 cents per line per insertion. Minimum space accepted, four lines. In estimating the cost allow seven words of ordinary length to a line. *When the advertisement contains a number of long words proper allowance should be made.* Terms: Invariably cash with order; check, postoffice or express order or stamps accepted. No display type used. Questionable or undesirable advertisements will not be accepted. The assistance of our readers in excluding undesirable advertisements is requested. We reserve the right to refuse any advertisement. No patent medicine, oil or mining stock advertisement accepted. Rate for special contracts covering space used as desired within one year as follows: 100 lines, 28c per line; 300 lines, 26c per line; 500 lines or more, 25c per line.

MINERAL AND TIMBER LANDS, WATER POWER, MISCELLANEOUS PROPERTIES

TIMBER AND TIMBER LAND
STANDING TIMBER—Original pine and cypress timber in tracts from 20 to 200 million each. LAFAYETTE MANN, 303 East Main, Richmond Va.

FARM AND TIMBER LANDS

FOR SALE—About 8 acres near Jacksonville, ideally located for dairy or chicken farm. Eight-room log cabin partly finished. Tools for hand and horse use; also wood-saw outfit on the place. Orchard started; lots of pine, gum and cypress timber. Excellent drinking water. This land divided into 48 lots, 55x250 feet. Details and price gladly furnished upon request.

M. WHIT SMITH,
Route 2, Box 210, Jacksonville, Fla.

FARM, FRUIT AND TRUCK LANDS

ARKANSAS
FOR SALE—Several small and a few large tracts land; both improved and cut over. Large tracts suitable for colonization. All these lands are within Miss. Co., Ark. Soil, black, sandy loam as fertile as the South Sea Islands. Two and sometimes three crops a year are raised here. Address
R. C. ROSE, Osceola, Ark.

FARM, FRUIT AND TRUCK LANDS

FLORIDA

THE BEST BUY IN FLORIDA. 12,000 acres high marsh land; can be drained for about \$10 per acre. Good for fig orchards, sugar cane, potatoes, willow for furniture; \$5 per acre net, one-fourth cash. SADLER, Box 484, Fernandina, Fla.

CARR & CARR, INC.,
WEST PALM BEACH, PALM BEACH,
LAKE WORTH.

References—any bank or trust company in Palm Beach County.

A WORD TO THE WISE!

Take advantage of buyers' market in Florida while owners of real estate need money. We offer business and home property, groves and river fronts.

GOODWIN & BAKER,
Fort Pierce, Florida.

FLORIDA produces the menu for America's table, from fruits to nuts; heaviest crops produced in the winter months, bringing highest prices in the frozen Northern markets. Finest winter climate in the United States. Approximately \$12,000,000 in our State Treasury; no bonded indebtedness; no State income or inheritance taxes, ever. We have a factory site, an investment, a home, grove or farm for you. Send today for booklet and 1927 list. Tampa-West Coast Realty Co. (Inc.), Opp. Postoffice, "Since Before the War," Tampa, Florida.

MISSISSIPPI

MISSISSIPPI GULF COAST is growing faster than any other section of the U. S. today. Millions are being spent here. Mild climate entire year. Raise oranges, grapefruit and truck farm throughout the winter months.

Beautiful building lots with splendid view of Gulf front, \$20 per front foot; easy terms.

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